

'A Political Geography of China's Boundaries'.

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**Thesis presented for the Degree of Doctor of
Philosophy of the University of Edinburgh in
the Faculty of Social Sciences.**

May 1965.



Acknowledgements.

I would like to express my thanks to my supervisor Dr. Norman Elliott for all his advice and helpful criticism during the writing of this thesis. I am also grateful for the encouragement given to me by Professor J. Wreford Watson whilst I was a research student at Edinburgh University.

The map curators of the Royal Geographical Society and the Geography Departments of Edinburgh and Liverpool Universities gave me invaluable assistance. I would also like to thank Mr. Douglas Birch for photographing the maps and Mrs. Irene Ashton for typing the manuscript.

M.D.S.

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SECTION ONE

Introduction

The objective of the following study is to try and answer two questions. Firstly, has China and those countries sharing a common political boundary with Peking managed to impose their political influence upon the state areas to the extent of modifying the geography, and have geographical considerations also affected political factors? Secondly, and related to the prior question, do the political boundaries provide a division within the landscape? Such being the aims of the study it would appear reasonable to describe it as an exercise in political geography. However, before proceeding to discuss the geographical and political factors at work in the specific examples chosen the author felt a need to define his interpretation of political geography in order that the dimensions of the thesis framework might be appreciated, and then to outline briefly the approach to answering the two inter-related questions posed. This is followed by a chapter devoted to developing at some length the suggestion within political geography that the imposition of a political boundary upon a landscape may provide a dividing feature within the geography of an area, in fact a somewhat broader, world wide, look at the second question within the thesis.

Perhaps no scholar in this century has contributed so much to defining political geography as Richard Hartshorne. He states ¹ that 'Political geography ... may be described as the study of the variation of political phenomena from place to place in interconnection with variations in other features of the earth as the home of man. Included in these political phenomena

1. R.Hartshorne: 'Political Geography in the Modern World';
Journal of Conflict Resolution 1960., Vol. IV., No.I., p.52.

are features produced by political forces and the political ideas which generate these forces'. This is a simple and attractive definition from which to begin, namely that political geography consists of seeing political organization and ideology in a geographical context.

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Pounds provides further understanding of the scope of the subject, stating, 'political geography is concerned with politically organized areas, their resources and extent, and the reasons for the particular geographical forms which they assume. In particular, it is concerned with the most significant of all such areas, the state'. What, from the political geographer's viewpoint, is a state? A state is a politically organized area, such as the political unit of China or Afghanistan. States have a certain viability which varies with each of the examples which will be dealt with in this study and consists in the effectiveness with which any state can be administered to fulfil certain purposes for which it was created. Within the state there are forces for integration and disintegration which influence the extent to which the political administration can modify the geography of the state area.

Often within the state area there will be a 'nation' or a number of 'nations'. It is rare for the state area to coincide with a particular 'nation'.³ Macartney defined the 'nation' concept as follows, 'when men band together they do so in an association which is a personal bond between man and man, an extension of the family tie, a 'Blutgemeinschaft'. This community may fairly be called a nation'. Within the area taken for this study the nation is usually a force for disintegration within the state.

A feeling of personal nationality is based on a *mélée* of factors, one of the most distinctive being common language. Of lesser importance today

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2. N.J.G.Pounds: 'Political Geography'; McGraw-Hill, New York 1963, p.1.
 3. C.A.Macartney: 'National States & National Minorities'; Royal Institute of International Affairs, London 1934, p.22.

in many areas is religion. Tradition leads to the regionalism of Scotland and Wales within the United Kingdom. Perhaps the least easy factor to substantiate is the belief in some kind of biological brotherhood; this unfortunate concept of race can be important in producing a feeling of personal nationality although it has been used most effectively to achieve political nationality. Racism was important to Hitler as a means of welding together his Third Reich. A belief in racial distinctiveness demands a certain amount of gullibility on the part of the group concerned.

Although Asia does not provide as many examples of personal nationalism as certain other areas of the world such as Europe often a growth of national awareness begins with the cultivation of folkways and customs; certainly Mongol nationalism owed much of its growth to the emphasis of cultural differences between the Mongols and the invading Han Chinese.

Within the state Hartshorne⁴ labelled the forces for integration and disintegration 'centripetal' and 'centrifugal'. Within the United Kingdom the allegiance to the Crown might be termed a centripetal force, whilst Welsh and Scottish nationalism would be considered centrifugal forces. Throughout most of the countries dealt with in this study poor communications can be termed 'centrifugal'. As Stephen Jones⁵ has pointed out the uniformity of the political map is most deceptive. This uniformity is perhaps nowhere more deceptive than with regard to China and its bordering states.

Freeman⁶ defines political geography as a study 'of states, nations, their resources, their relations one to another, all based on their regional geography'. The need for a regional description as a basis for a study in pol-

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4. R.Hartshorne: 'The Functional Approach in Political Geography'; Annals of the Association of American Geographers, Vol.40, 1950, p.27.
 5. S.Jones: 'View of the Political World'; Geog. Review Vol.45, 1955, p.301.
 6. T.W.Freeman: 'A Hundred Years of Geography'; Gerald Duckworth & Co., London 1961., p.205.

itical geography has been recognised in this thesis for a regional geography implies a knowledge of the physical characteristics of the land and the people, a study of culture and history, and an acquaintance with the economic factors at work. From such a knowledge the political geographer has a reasonable foundation from which to ascertain the political impact upon the geography of the state area, the influence of geography upon politics, plus an appreciation of the position of the state within the larger global pattern.

The world pattern is of prime importance as 'in an age of global political relations ... the political geographer is required to keep constantly in mind the world as a whole'.⁷ Two thousand years ago a world view was not so important as there were distinct regions almost totally unaware of each other (e.g. the Roman and Chinese Empires). But by 1914 the assassination of an Austrian royal prince at Sarajevo would involve in the next four years of World War such diverse states as those of China, the United States, the Austro-Hungarian Empire, South Africa, French Indochina and Australia to name only a few of the participants. Since the First World War the rapid improvement in means of international communication has further emphasised state interdependence. The isolationist America of the Nineteenth Century contrasts with the United States in the 1960's which can be deeply affected by plans made in Moscow, or Peking, or Saigon. Similarly the political geography of a state such as China professing a Communist ideology is affected by its relationship to the United States which is 5,000 miles away; to cite one example only Sino-American hostility influences the distribution of new industry within China with all the attendant results of, say, introducing manufacturing amongst the Uighur nation of Sinkiang.

7. R.Hartshorne in 'American Geography: Inventory & Prospect', edited by P.E.James & C.F.Jones; Syracuse University Press 1954, p.143.

Political geography with a global view first caught the attention of the academic world in 1904 when H.J. Mackinder presented a controversial paper before the Royal Geographical Society. It not only tried to analyse the political make-up of the world, but also attempted to formulate a means of predicting future developments on the world political scene. Briefly, Mackinder recognised a 'geographical pivot of history' consisting of the interior of Eurasia inaccessible to ships and sea power. Enclosing the pivot area to the west, south and east was a 'marginal (inner) crescent' which, unlike the pivot region, is drained to a sea or ocean and therefore is accessible to sea power. Outside the marginal crescent which stretched from Scandinavia to Manchuria, were the lands of the 'outer (insular) crescent'. The marginal crescent was partly continental and partly oceanic, but the outer crescent was wholly oceanic (North America, South America, Britain, South Africa, Australia and Japan). According to Mackinder there was a 'certain persistence of geographical relationship' between the pivot area and the inner crescent based on an outward pressure from the former on the latter. Impressed by what had been achieved by the pivot area nomads equipped only with the horse and camel Mackinder forecast even greater mobility for the peoples of the region with the building of railways. If the Germans and Russians allied themselves, or the Chinese were organised by the Japanese to take over the Russian Empire, then Mackinder envisaged the marginal crescent countries such as France, Italy, Egypt, India and Korea becoming 'so many bridgeheads where the outside navies would support armies'.

Mackinder later modified his original thesis so that in 1919, for ex-

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8. H.J. Mackinder: 'The Geographical Pivot of History'; Geographical Journal Vol. 23., 1904. Reprinted in 1951 by the Royal Geographical Society.
 9. See H.J. Mackinder: 'Democratic Ideals & Reality'; Constable, London 1919., & 'The Round World & the Winning of the Peace'; Foreign Affairs, July 1943.

ample, his pivot area was renamed 'the Heartland' and extended; 'the Heartland, for the purposes of strategical thinking, includes the Baltic Sea, the navigable Middle and Lower Danube, the Black Sea, Asia Minor, Armenia, Persia, Tibet and Mongolia'. The First World War had shown Mackinder that naval power could be denied certain areas which he had assumed were open to it.

Mackinder's 1904 paper was 60 years too late as he was speaking of the significance of the railway age at the beginning of the air age. But his work has importance for the political geographer as it was a pioneer attempt to formulate a global view. A little before Mackinder's paper the American naval officer A.T. Mahan had produced a book entitled 'The Influence of Sea Power Upon History 1660-1783'. This was of less interest to the political geographer than Mackinder's work, but nevertheless was a 'world view' taken in the closing years of the 19th. Century. Mahan wrote of the six factors affecting naval power; the geographical location of the state, the configuration of its coastline, the extent of its territory, the size of the population upon which the state could draw, the national character of the people, and the nature and policy of the state's government. Mahan was 'well grounded in the geography and technology of his age'¹⁰ but the events of the 20th Century have outdated his views. Mahan's purely naval view of the world suffers even more from the ravages of time than does that of Mackinder.

The writings of Mackinder, and to a lesser extent Mahan, made a great impact upon later political geographers. One of the most notable attempts to adjust Mackinder's heartland thesis to changing conditions was that of N.J. Spykman.¹¹ Spykman gave greater importance to those states which en-

10. N.J.G. Pounds: 'Political Geography', McGraw-Hill Inc; New York 1963. p.396.

11. N.J. Spykman: 'The Geography of the Peace'; Harcourt, Brace & Co; New York, 1944.

circled the heartland and termed this surrounding band the 'Rimland'; the rimland approximated Mackinder's inner crescent. Spykman suggested that 'there has never really been a simple land-power - sea-power opposition. The historical alignment has always been in terms of some members of the Rimland with Russia, or Great Britain and Russia together against a dominating rimland power.' In many respects Spykman's suggested policy for the United States, which was basically the control of the Rimland, is similar to G.F. Kennan's suggested 'containment' of the Soviet Union by the United States.¹²

Physical geography has been stressed by both Mackinder and Spykman, but in 1956 D.W.Meinig¹³ emphasised the cultural geography in another modification of the heartland concept. Meinig's heartland was smaller than either Mackinder's or Spykman's, and he divided the Rimland into continental and maritime subdivisions. The Rimland subdivisions Meinig illustrated by the example of China, a fortunate choice with regard to this study. 'Land based northerners have dominated Chinese culture throughout most of her history and whenever they have been in political control, as under the Han, T'ang, Mongol and Manchu Dynasties, China has been oriented primarily inwardly as a landed, peasant society with her strategic frontier resting upon the steppe zone of the heartland region. On the other hand, when control was exercised by the South China groups, as under the Southern Sung, the Mings, and the recent Nationalist government, a strong maritime outlook was emphasised.' Today the continental and maritime Rimland is delimited by the Communist boundary with the rest of the world, and supposedly American 'containment' prevents the continental Rimland absorbing any more of the maritime Rimland. Meinig's

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12. G.F.Kennan: 'The Sources of Soviet Conduct'; Foreign Affairs, Vol.25, 1946.
 13. D.W.Meinig: 'Heartland & Rimland in Eurasian History'; Western Political Quarterly, Vol.9, 1956.

hypothesis has the advantage that it is not as rigid in its delineations as that of Mackinder.

Mackinder's work stimulated much interest in northern Europe, notably influencing Kjellen of Sweden and Haushofer of Germany. Kjellen, Professor of Political Science at Uppsala, was the first scholar to use the word 'geopolitik'. Also important amongst the north European group was Ratzel's 'Politische Geographie' which had appeared in 1897. Ratzel placed his emphasis upon space and position, which he felt determined the destiny of each part of the earth's surface. Space was the major aim of a state's ambitions. It was Ratzel who first suggested the idea of the state as an organism, an hypothesis which was taken up later by Haushofer and Maull in Germany.

Haushofer's name will always be associated with the German brand of so-called geopolitical thinking which flourished between the two World Wars. In 1934 Haushofer defined the difference between geopolitics and political geography as he saw it, 'Geopolitics is dynamic, in contrast to political geography, it is a way of educating the masses in the concept of space'¹⁴. In fact for General Haushofer geopolitics became a justification of militant German nationalism; politics with a minimum window dressing of pseudo-geography. Bowman was being generous when he referred to the 'recent "science" of geopolitics which assumes that political events depend upon the soil'¹⁵. The exaggeration and manipulation practised by the Haushofer school in Germany prior to the Second World War, plus the association of

14. K. Haushofer: 'Atemweite, Lebensraum und Gleichberechtigung auf Erden!'; Zeitschrift für Geopolitik, Vol. II, 1934. See also G. Kiss: 'Political Geography into Geopolitics'; Geographical Review, Vol. 32, 1942, p. 641.

15. I. Bowman: 'Geography vs. Geopolitics'; Geog. Review, Vol. 32, 1942, p. 648.

these scholars with the Hitler regime, has soiled, perhaps forever, the term 'Geopolitics.'

The work of Haushofer, and to a somewhat lesser extent Mackinder, is no longer fashionable. By 1942 Bowman¹⁵ could state with authority that 'neither Mackinder nor Haushofer had theories that could stand up to the facts of air power and its relation to industrial strength.' Nevertheless a debt must be acknowledged to Mackinder for emphasising the importance of a world view in political geography. As will be seen throughout this study in trying to answer the two questions posed it is difficult to abandon a world view.

What, then, is political geography? The author favours the five sections listed by Pounds¹⁶ which entail an investigation into:

1. 'The geographical coincidence of state and nation. This raises the question of political boundaries and claims to territory, of dissident groups within and of related groups without the limits of the state.'
2. 'The resources which the state can command in the pursuit of its objective, the well-being and integrity of its people. These resources consist of the location, size, and shape of the state, which influence its strategy and defence and, through communications and transportation, its cohesion; second, the population, its structure, competence, and skills; and, lastly, naturally occurring resources, their utilization, and the degree of industrial and technical development.'
3. 'The social cohesion of the population. Since this is in all respects an important factor in national power, the focus of loyalties within the state and the division of the state for administrative purposes acquire in some instances a political importance. In some respects the

15. I.Bowman: 'Geography vs. Geopolitics'; Geog. Review, Vol.32, 1942, p.648.

16. N.Pounds: 'Political Geography'; McGraw-Hill; New York 1963, pp.19-20.

social cohesion within a state is reflected in the geographical patterns of voting habits, which thus become an important element in the study of political geography.'

4. 'The state does not rely wholly on its own internal resources. It is likely to have allies and dependencies which in varying degrees support it in the pursuit of its primary objective. The geographical pattern of its alliances, the distribution of colonies, dependencies, and bases, and the division or joint use of resources are all factors in the power of a state.'
5. 'Every state carries on trade, however limited in scope this may be in some instances. Trade may be a source of strength, or excessive dependence upon certain goods and markets may spell weakness. Trade can be, and sometimes has been, used as an instrument of policy, and an evaluation is necessary of the significance of trade in the power potential of the state.'

Each of these sections has a certain relevance in the following study. The subdivisions are largely self-explanatory, but perhaps there is a certain need to elaborate, notably with regard to the first of Pounds' sections where there is reference to 'political boundaries'. As the latter are of such importance with regard to the two questions which this thesis attempts to answer a little more concerning political boundaries must be said at this point.

Boundaries are used politically to delimit the jurisdiction of one state from another. Within boundaries a state is largely its own master, even to the extent of controlling the air space above its territory (although so far satellites are free agents). With increasing national awareness the political boundaries have often been centres of dispute. The ill-defined frontier area between two states demands precise delineation into a boundary line once the

adjoining states are caught by the fever of nationalism, this can be seen happening along many of China's borders.

A boundary can either be delimited, or it can be delimited and demarcated. These terms were introduced by Sir Henry MacMahon, who had been largely responsible for the delimitation of the Tibeto-Indian and Sino-Burmese boundaries in 1913-14. Later he wrote ¹⁷ "Delimitation" I have taken to comprise the determination of a boundary line by treaty or otherwise, and its definition in written, verbal terms; "Demarcation" to comprise the actual laying down of a boundary line on the ground, and its definition by boundary pillars or other similar physical means'.

The territorial boundary is still of immense importance, and its related problems of delimitation and demarcation, but the area chosen for study is further complicated regarding the answering of the questions posed by the intrusion of an ideological boundary. It is impossible to ignore the fact that China favours a Communist creed of revolutionary flavour when viewing the effect of, for example, the political boundary between China and Hong Kong upon the local geography.

The table of contents has been designed with the intention of trying to take into account the various relevant aspects of the author's interpretation of political geography and applying them to an attempt to answer the two questions which were posed at the beginning of this introduction, namely have the states which are dealt with imposed their political authority within their areas and thereby modified the geography within the state unit (and have geographical factors modified political considerations), and, looking outside

17. Sir H. MacMahon 'International Boundaries'; *Journay of the Royal Society of Arts*, Vol. 84, 1934, p. 116.

the state areas, are the political boundaries between China and the surrounding states divisions within the geographical landscape?

As has previously been mentioned the second part of the first section of the study is a further look at the political boundary as a dividing feature in geography, in fact it might be termed a further introduction to the second question to be answered. In this chapter a look is taken at the differences between frontiers and political boundaries, of much significance where China is concerned, and the functions and variety of boundaries. At the same time the geographical impact of the political boundary is shown by means of a number of examples throughout the world so that the significance of political decision to the geographer may be appreciated. Also dealt with is the relative effectiveness of states at certain stages of development and of different forms of government in the implementation of political decision.

The second section is devoted firstly to dealing with the phenomena of Communism, and then with China, which is the centre piece of the thesis and a Communist state. State of mind is so important where the various peoples of a country are concerned that it would be impossible to attempt any study in political geography without dealing with the forces that mould popular opinion. Just as Fascism was the dominant ideological force in Germany from 1933 until 1945 so to an even greater extent Communism is the moulding force within China, North Korea, North Vietnam, the Soviet Union and the Mongolian People's Republic; in China it is not even challenged by any religious belief. As Communism pervades most aspects of life within these states, and influences the bordering countries, it is necessary to try and establish briefly the nature of the ideology and its distribution throughout the world. Following on from this the final chapter of the second section endeavours to present a

reasonably comprehensive regional geography of the Asian dynamo of Communism, China.

Section Three is an attempt to place the political boundaries involved into four main categories based on the political opinions, and to a certain extent size, of the states bordering China. Needless to say this has many limitations, but does help to clarify the political situation with regard to the boundaries and states and makes more manageable the material involved in answering the two thesis questions. With the exception of one example from each of the categories the various states are dealt with in the second chapter of this section, beginning with the minor neutralist countries, followed by the major neutralist, the western committed, and finishing with the Communist. Briefly in each example an attempt is made to produce a geographical picture of the state, and notably the boundary area between the state and China before answering the two questions which provide the theme of the essay. Having chosen China and its surrounding states it was realised from the beginning of the study that often the main difficulty would be procuring certain geographical information, and so the material is at times far less comprehensive than the author would have wished; to cite a few inadequacies to illustrate the problem, the Chinese have not published any economic statistics for the period after 1960, there is no precise delimitation of many of the tribal areas along the Chinese political boundaries, and map coverage is often non-existent.

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18. There is by no means complete agreement on the delimitation of Asia's area, but throughout this study the example of G.Wint is followed (i.e. 'Spotlight on Asia', 1959, p.18) in that 'geographically the Arab countries of the Middle East (except Egypt) belong also to Asia. So does Turkey. But recent custom has promoted the Middle East into being almost a continent of its own. Its problems ... are usually treated as being distinct from those of the rest of Asia'. If the so-called Middle East is excluded from Asia, China and the surrounding states account for well over half the continent.

Each of the examples omitted from Section Three is given a separate section following. Thus Section Four consists of a study of Nepal as a representative state from the minor neutralist category. This permits a look at the state and political boundary concerned in greater detail, something which the author would have liked to have done for all the states bordering China, but which would have proven unmanageable in length. The treatment is similar to that for China in Section Two beginning with an outline of the historical development of the state, followed by a more brief discussion of the physical characteristics of the land, then a description of the people, and finally the economy. Here the aim is to discover the nature of the political unit which is in this case called Nepal, and this enables the final chapter of the section to be used for looking more closely at the political geography of the Sino-Nepalese boundary before answering the two questions related to the boundary and the influence of Nepal's administration on the country's geography. Similarly, Section Five attempts a like approach to the major neutralist example of India's North East Frontier Agency which is not a state, but which provides something of a political unit within a state. Section Six has the western committed example of Hong Kong, and Section Seven the communist category represented by the Mongolian People's Republic.

The Conclusion represents a look at the whole of China's political boundary in the light of the two thesis questions, and based upon the material which has been dealt with in previous sections. If a title was given to this section it might well be 'The Political Geography of China's Boundaries'.

CHAPTER ONE

The Political Boundary as a Dividing Feature in Geography

As the political boundary is of such significance within this study, and notably with regard to the answering of the second of the two thesis questions, it is as well to go into a little more detail concerning the nature and effects of such a line upon the landscape. It is a complex subject which needs further discussion before a close look is taken at the Chinese examples.

Throughout most of the modern world the territorial limits of any state are defined in terms of boundaries. It should be appreciated at this point that not only are there lines delimiting the area of the state, but also within the state there are often political subdivisions marked by boundaries. To quote one example there is the main United States-Canada boundary dividing the North American continent, but within Canada there are further lines for such provinces as Ontario or Manitoba. Similarly within the United Kingdom there is the county boundary. Whether it is an international boundary such as that between China and Afghanistan, or a provincial one such as that between Chinghai and Sinkiang within China, in either case it is a line which is the outcome of human decision, and as such is an artificial phenomena in every example. There is no such thing as a 'natural' boundary. But this is not to say that geographical distributions cannot have considerable impact upon the boundary and influence it extensively and, similarly, a political boundary can modify most effectively the geography of the border zone.

The linear boundary develops from the frontier which is a barrier zone between two states or two different cultures. The most well known frontier within the Anglo-Saxon world was that of the United States where the barrier zone was continually on the move mainly in an east to west direction following

the first settlements along the Atlantic coastlands. The indigenous Indian cultures inhibited, but failed to stop, the more advanced European culture. For 150 years the frontier between European settlement and the Indians was marked by the Appalachians, then towards the end of the Eighteenth Century the Mississippi gave a rough guide to where the frontier within the United States existed. The frontier continued to move westward helped by the political impetus provided by such actions as the 1803 Louisiana Purchase from Napoleon I, and the Texas Annexation of 1845-48. Where American expansionism was eventually checked along the frontier with Canada or that with Mexico the barrier zone was defined more precisely as a boundary.

In much the same way, but less satisfactorily, the British under Sir Henry McMahon in 1913-14 endeavoured to change the frontier zone between British India and Burma, and the Chinese Empire and Tibet into a boundary, a process which China is today still involved in as can be seen from the Sino-Burmese boundary agreement of 1960 and the Sino-Indian border conflict of 1962. The frontier is a vaguely defined area where a state's effective control is usually least. With the advent of a political boundary a well organised central authority can then begin moulding the area involved into a closer resemblance to the rest of the state. The 1961 delimitation and later demarcation of the Sino-Nepalese frontier into a boundary has led to increased activity on both sides to bring the former frontier zone within the respective political frameworks.

But once a boundary has been drawn between two states its functions are often viewed differently by the particular governments concerned, and therefore the geographical implications of the line may vary. The differences in ideological outlook between East and West Germany makes the boundary between the two states of greater geographical significance than that between Kenya

and Tanganyika which possess a closer political outlook; the hostility between the two Germanys leads to a greater effort to integrate the state area on each side of the boundary.

1

S.W. Boggs has listed a number of functions of modern boundaries with regard to both persons and to materials. The boundary can place restriction on immigrants, visitors, and foreign working men, the reasons ranging from fear of competition for employment, to unwelcome political ideas, to fear of ideological contact with the state's citizens. At the boundary aliens or nationals may be examined and detained because of disease or for reasons of justice, and similarly persons engaged in the illegal movement of things may be apprehended. The boundary also serves as a place to collect duty on imports and exports, where the influx of foreign goods to compete with domestic production is stopped. Money and precious metals can be controlled, as can be flights of aircraft across the state area. Lastly Boggs mentions the exercise of sanitary measures such as animal quarantine. This is not a complete list, and it should be emphasised that only a number of the functions are carried out at the border, and with the growing importance of such modes of transport as air travel it is a decreasing number. A boundary marks the limit of a state's jurisdiction and it is therefore always secondary to the state itself. However, Boggs' list does demonstrate some of the factors which can affect the geography of the state; to quote one example at this stage it can be seen that Australia's immigration restrictions have prevented an influx of Asians to swell the ranks of its citizenry which would have modified the cultural geography of the continent. The attitude of the states involved leads to a wide variety in the functions of boundaries, and similarly the boundary functions may

1. S.W. Boggs: 'International Boundaries'; Columbia University Press, New York 1940, p.5.

operate selectively so that it is much easier for a Briton to emigrate to the United States than it is for an Italian. The impact of the boundary upon the geography of the states involved usually depends largely upon the functions served by the boundary.

The extent to which a boundary is an obstacle is affected by a number of factors. Firstly there is the question of the precision of its definition. A good guide to this is whether it has been both delimited and demarcated. After there has been a territorial allocation in the frontier zone a boundary may be delimited by treaty only, or this stage of the political settlement may be followed by demarcation. Whereas delimitation defines a boundary, demarcation involves a field operation and the erection of pillars as in the recently demarcated Sino-Nepalese borderline, or perhaps forest clearing as along parts of the U.S. - Canada boundary.

Following the delimitation and demarcation of the boundary between the two states immediately involved it is often important that the line should be acknowledged internationally before its full effect can begin to come into play. There are 'de facto' boundaries which are acknowledged but not accepted by all states, such as that along the 17th parallel in Vietnam, and 'de jure' lines which are recognised by all states in international law as with most boundaries. The greater stability offered by the second category of boundary usually leads to more influence by the state upon the area's geography although there are exceptions as witness South Vietnam where the whole village pattern has been changed to one of a defensive nature throughout the country due to North Vietnam's acknowledging the boundary, but showing its non-acceptance by the use of an active fifth column.

Perhaps of greater importance to the geographical effect of a boundary is the attitude of the people on each side of it. If like the Kenya-Tanganyika borderline you have a nomadic tribe such as the Masai within the area and

practically oblivious of its existence its significance is limited; similarly the Lapps appear to be unaware of the international boundaries between the Soviet Union, Finland, Sweden and Norway. But where the people on either side of the boundary regard it very much as an international division, as between the Soviet Union and Turkey for example, its impact is far greater.

Boggs ('International Boundaries') divides boundaries into four categories, namely 'Physical', 'Geometric', 'Anthropo-geographic', and 'Compound'. Although only limited use is made of such classifications in this study it is useful to look at both the work of Boggs and Hartshorne in order to throw further light on the characteristics of political boundaries. Boggs' 'Physical' type is that which conforms to some physical feature such as a river, or mountain crestline, or watershed. In the past the 'Physical' boundary was often of defensive importance as it provided a check. Although modern technology has decreased even further the effectiveness of such a boundary between states amongst others the hypothesis that it might be of defensive importance to a state prevailed into modern times, as witness the Soviet Union using this as an excuse to absorb the Pripet marshes at the end of the Second World War. The 'Geometric' or 'Mathematical' boundary is largely self-explanatory and refers to the use of straight lines, or arcs of circles and the like by the states involved. These tend to disregard geographical factors and perhaps display to the fullest extent just how an arbitrary political decision can eventually become an easily recognisable geographical division. Much of the U.S. - Mexico boundary is made up of straight lines, and yet despite a certain amount of diffusion each side of the border it marks a well defined division between two very different cultures and economies. Despite its Spanish name nobody could doubt that San Diego is an American Town although it is only a

short distance from the straight line which divides the United States from Mexico. Similarly Santo Tomas on the other side of the boundary retains the characteristics of a sleepy Mexican village. 'Anthropo-geographic' boundaries are related to some aspect of human occupation. The most notable attempt to define such lines followed World War I in Europe when new states were set up delimited by boundaries which supposedly separated areas with different ethnic traits within them. In theory this was an experiment in drawing a boundary along some geographical division such as language, religion or tribal affiliation. The difficulty with such 'Anthropo-geographic' boundaries is that it is rarely possible to exclude minority groups as there are no sharply defined limits to the cultural area. As the new states which emerged after the First World War from the rubble of the Turkish and Austro-Hungarian Empires were delimited along 'Anthropo-geographic' boundaries they provide an interesting study in the effectiveness of such efforts to make an apparently geographical division serve as a political line. By 1945 Rumania, Hungary and Yugoslavia were squabbling over the Banat area along their borders, Yugoslavia and Austria over Slovene Carinthia, Rumania and Hungary over Transylvania, Poland and Czechoslovakia over the Teschen area, and Bulgaria and Greece over Macedonia, to mention but a few examples. As is usually the case if the central authorities involved had been effective enough in their state areas, and the international situation favourable, given time the frontier zones might have been integrated into the state areas on either side. Finally Boggs writes of 'Compound' boundaries which he considers represents a compromise between several approaches; this incorporates two or more of the other categories so if the U.S. - Mexico boundary is taken the western part is 'Geometric', but in the east it follows the course of the Rio Grande and is therefore composed of a 'Mathematical' and a 'Physical' section, and in

its entirety is a 'Compound' boundary.

2

In 1936 Hartshorne carried out an interesting attempt at the classification of boundaries. The three main subdivisions he named 'Antecedent', 'Subsequent' and 'Consequent', not very original terms, but it must be remembered that this was an early venture in the field. Within the 'Antecedent' category Hartshorne had further subdivisions, the first being what he termed the 'Pioneer' boundary; this was a line drawn before any extensive settlement takes place in an area and well represented by some of the boundaries Boggs called 'Geometric'. America during the Nineteenth Century saw the drawing of many such boundaries by the authorities in Washington, a sort of casual armchair decision on delimitation of scantily explored lands. Little respect was shown for geographical features as witness the boundaries of Colorado which make an oblong outline despite there being such favoured physical phenomena as rivers, watersheds, and mountain crestlines in the area. The second division of the 'Antecedent' category of boundary Hartshorne lists is the 'Relict' line, a boundary which has been abandoned for political reasons, but which can still be discerned in the cultural landscape. This type illustrates much of the powerful impact a political boundary can have upon the geography of an area. An example of a 'Relict' line would seem to be provided by the inclusion of the Serbs within the Yugoslav state. It should be noted with regard to the Yugoslav example that the newer state boundaries are taking effect with the passing of time despite the Serbs having been vigorous opponents of the Yugoslav state following its establishment after the First World War. With an increasingly effective state administration

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2. R.Hartshorne: 'Suggestions on the Terminology of Political Boundaries'; Annals of the Association of American Geographers, Vol.26, 1936; pp.56-57.

Serb opposition to Yugoslavia grows yearly less, despite the President being a Croat, and therefore a member of a group which is traditionally hostile to the Serbs. If the central authority within the state is powerful enough 'Relict' boundaries eventually disappear.

Hartshorne's 'Subsequent' category is composed of those boundaries which conform to some major or minor geographical division of a physical or cultural area, which is similar to Boggs' 'Physical' and 'Anthropogeographic' classification, plus those boundaries which have been superimposed on the landscape, but have been accepted by the states and people on either side. An example of the first type is provided by the use of the Amur River to divide the Soviet Union and the People's Republic of China, but in this area the U.S.S.R. has not been as effective in moulding its image and its former friendship with Communist China has led to less emphasis upon this boundary. Peking has hinted at dissatisfaction over the Amur as a boundary so the situation is such as to inhibit the development of a well-established political line. Being as yet something of a pioneer area both for the Soviet Union and China the effect of political decision on the geography has not been obvious. The second category of Hartshorne's 'Subsequent' boundaries can be seen in Europe where there are lines such as that between Belgium and France which divides the French speaking Wallons from the territories of France. The Belgian-French boundary is superimposed upon the landscape and yet in the main is accepted by both the people and the states on either side. Often such a superimposed boundary can develop as a very distinct geographical division as is beginning between East and West Germany, although in this case it has not been fully accepted by either the Germans or their respective governments. The Bismarckian superimposed boundary between Denmark and Germany has led to different ways of life on either side

of it although until the Nineteenth Century Schleswig-Holstein was part of Denmark. Both the Danes and the Germans have now accepted their common boundary and it has itself become something of a geographical feature.

Where a geographical feature has acted as a dividing line within a landscape Hartshorne referred to it as a 'Consequent' boundary when it has been used for political delimitation, for it is a political boundary which is consequent upon the dividing feature. Again, this is a subdivision of Boggs' 'physical' boundary category. Hartshorne splits 'Consequent' borderlines into 'Static' and 'Kinetic' types. The former is a zone of limited density of population between more highly populated areas, such as the use of the Gobi Desert along part of the China-People's Republic of Mongolia boundary. Usually in these cases the political line does not have as much effect upon the region's geography as when more highly developed zones are favoured. The 'Kinetic Consequent' boundary is a physical hindrance between two regions such as the Himalayan borderline between Nepal and China. To what extent this type is a physical hindrance depends upon the technology of the border states, even a backward country like China was capable of launching 15 or so divisions through the Himalayas and into India in 1962. Although security has often been an important factor in the location of boundaries any 'Kinetic Consequent' line can only assist a state in defence as there is no such thing as a barrier to a determined military force as witness Hannibal's march into Italy.

Although the boundary classifications of two well-known authorities have been taken it should be appreciated that neither is fully acceptable as each boundary has a quality of uniqueness; no two boundaries serve exactly the same functions, nor do they cross identical landscapes, nor have they the same history, nor do states have the same outlook where boundaries are concerned. But the work of Boggs and Hartshorne does provide a broad foundation upon

which to construct a fuller picture of political boundaries and their geographical and political implications.

Previously reference has been made to the stage of technology of the states on either side of the boundary. This, and the country's territorial maturity, is of great relevance. A state can be said to be territorially mature when the power of the central authority is equally effective throughout its area. A look at Brazil shows that this is not true of the situation as the state has not integrated successfully much of the country's interior area. Similarly the state must have satiated its appetite for further expansion at the expense of its neighbours. The United Kingdom is territorially mature as it has integrated its area under one central authority and has no expansionist ambitions. Nazi Germany, with its policy of 'lebensraum', was not so. Once a state is territorially mature its boundaries will become stabilized, and the borderline will usually more greatly affect the geography of the area. Similarly the higher the stage of technological achievement within the state the greater one would expect the impact of the central authority to be within the state area so that if there are two distinctive ways of life such as the Communist system of East Germany sharing a boundary with the Democratic state of West Germany it would be expected that if the two areas continued under these conditions within the foreseeable future there would be a political boundary acting as a geographical division. An advanced technology is an impressive vehicle for producing greater conformity within the state area, especially if it is backed by a strong central authority. Within the United Kingdom the greater powers of the administration in London and the increasing technological abilities of the population yearly makes the England-Scotland, and the England-Wales

boundaries of less significance. This is the case with most provincial lines in areas of advanced technology. But conformity within the state area does not imply international conformity; it leads in fact to sharper divisions along the various state boundaries so that such lines as that between France and Spain become well defined because the governments involved not only desire to produce an easily recognisable political unit, but have the ability to move towards that goal.

The type of government will also affect the geographical significance of a boundary. It is possible to divide the political institutions of the world into absolutist and parliamentary categories, and as the power of the former is wider and greater in most cases one would expect its impact on the state area to be fuller. An absolutist monarchy such as that of the Shah of Iran has certain advantages over political or totalitarian dictatorships as in the main there is no succession problem thus giving the state greater stability. The matter of stability and the time in which a boundary has to take effect is of importance to the geographer, as the political line which has remained the same for 150 years or so, as for example the Portuguese-Spanish boundary, will be more of a geographical divide than one such as the Burma-China borderline which has been under dispute for over a century and has not had any stability until the Sino-Burmese agreement and delimitation of 1960.

A political dictatorship like that of President de Gaulle in France has more power than a prime minister in a parliamentary democracy, but less effect than a totalitarian dictatorship such as that which Stalin wielded in the Soviet Union. The Gaullist regime ruling France gives a very definite impression that the administration is having a greater influence within the state area than the democracy which ruled prior to the taking over of power by de Gaulle. It is interesting to note that whereas before de Gaulle began

governing France the Common Market was advancing methodically towards a breaking down of the boundaries between the six member countries, since then political dictatorship has led to a further emphasising of France as a distinctive unit within the Common Market.

But there are limitations on the power wielded by a political dictatorship which are not so apparent in a totalitarian dictatorship. The totalitarian despot endeavours to control all aspects of life within the state area, Stalin controlled the sort of music the people of the Soviet Union were permitted to listen to which is something it would be hard to visualise happening within modern France. Similarly within Communist China, except for Mao Tse-tung's 'hundred flowers' episode, even the thoughts of the citizens are regimented. In totalitarian dictatorship there usually is the most effective emphasis upon the political boundaries, and where the totalitarian state shares a boundary with a country administered by a different form of government there tends to develop very rapidly a distinct geographical division. The advent of Hitler upon the German scene in 1933 rapidly led to the further emphasis of the Franco-German boundary with even the physical landscape being changed with the building of vast networks of military installations. On one side there was the totalitarian state of Germany being welded into a unit by means of the autobahn system and intensive propaganda, and on the other side the French democracy with a different attitude towards the farmer, not on a war economy basis with regard to industry, and a population enjoying much greater freedom in all matters of daily life. Given an adequate technology a totalitarian regime can act more quickly than perhaps any other form of government so that with the development of hostility between the two Communist regimes administered from Moscow and Peking an effective curb has been

placed on the migration of the tribes within Central Asia. In a matter of months the Sino-Soviet boundary has become a geographical fact to the nomadic herders of Sinkiang and Soviet Central Asia and will change a way of life which has been favoured for many centuries. A permeable boundary has become impenetrable and will therefore modify the human geography on either side of it. As the Han administration gains momentum in Sinkiang and the rule of the Soviet Union in the Central Asian republics these nomadic herdsmen who are being forced to settle will become more and more culturally assimilated by their respective states. Whereas a democracy usually has to persuade its citizens to follow its lead, a totalitarian government can force such minorities as the Uighurs to conform.

Democracies can be divided into those which adhere to the monarchical system, such as the United Kingdom, and those which have a Republican government with a president as head. The crown in Britain or Belgium is a hereditary position wielding little actual power, but providing a suitable figurehead to the elected governing body. A democratic president has more power, but the amount varies. The American president endeavours to rule the state, but the West German president is more of a figurehead. But whether a democracy has a monarchy or an elected president it has in common the citizen's right to vote for the person he or she would like to see in parliament, the body which governs the state. As the people of the country are active participants in the government there is a limit on just what measures such a body as the British cabinet can carry out. A democratic government is accountable for its actions whilst a totalitarian regime is not. Under certain circumstances a democratic government can carry out the sort of programme favoured by the totalitarian states, such as Ottawa's administra-

tion and development of Canada's Northwestern Territories or Canberra's participation in Australia's Northern Territory, but these are exceptions. And yet democracies are often forced to become less democratic, and there is a greater governmental interference in the freedom of the individual. Within Britain the increase of population pressure on resources leads to legislation to limit such things as the use of land. The powers of all the democratic governments are growing and so much their impact upon the geography of the state. If one example is taken it can be seen how state characteristics are modified. The government's right to impose tariffs on the import of foreign farm produce into the United Kingdom, and its subsidization of British farming means that the agricultural prosperity and land use are the outcome of there being political boundaries between the United Kingdom and Denmark and the Netherlands which are across a few miles of water. Denmark and the Netherlands are able to produce dairy products, bacon, flowers, vegetables and the like more cheaply than the farmers of the United Kingdom so that if the British boundaries and all they imply were removed it would seem probable that much of the agricultural land within Britain would either fall into disuse or be used for other purposes. Also within the United Kingdom there is a subsidization of the development of what are less economically attractive areas, such as the Northeast of England, by the prosperous regions of the Midlands and South under a deliberate governmental policy which again might not take place if the state boundaries were no longer in existence. Within China strategic considerations have led to a similar situation where industry is being directed to the interior of the state despite, for example, Sinkiang being so far less attractive than the more highly developed areas of the coastal provinces.

Republican democracies like West Germany and the United States have federal governments which brings the topic to the question of the relative importance of provincial boundaries to the geographer. Germany was a Nineteenth Century edifice made up of a number of political units such as Prussia, Bavaria and Saxony which were of singular significance to the geographer of that time, at least one historian has suggested that the reason for Germany entering the First World War was to stop the confederation of states from falling apart. Under Hitler the effort to break down the former boundaries was increased with the myth of the German 'nation' endeavouring to flatten the actuality of Bavarian citizenship. Since World War II the significance of the provincial boundaries has continued to decline although the state is named the Federal Republic. The counties of Britain still have powers over education within their areas, plus local roads, libraries, building permission, the health service and other functions. Within the United States the battles between Washington and the southern states demonstrate that the provincial boundary is often hard to overcome. As yet it is not possible for the geographer to dismiss altogether provincial boundaries, to ignore such a line as that between Tibet and the Han Chinese provinces within China is not realistic.

Again, of primary importance is the attitude of the people towards the boundary. Bismarck thought of himself as a Prussian, not as a German, and German unity came about almost in spite of his attitude. But by the time the Austrian Adolf Hitler was fighting in the First World War the German idea was much stronger in the minds of the German speaking people. Similarly there is an international boundary in Ireland because six Ulster counties

were unwilling to be part of the Republic of Ireland, and since then Northern Ireland has continued to grow apart from the rest of Ireland. A boundary which did not exist until the Twentieth Century has led to a distinct geographic division so that one can cross from the primitive smallholdings of Donegal to the subsidised and heavily capitalised farming landscape of Londonderry. It seems doubtful that Donegal and Londonderry were that different before the partition of Ireland, but today the people feel themselves loyal to different states and the landscape demonstrates this variety of outlook. Without the necessary attitude towards the political boundaries on the part of the governments concerned and the peoples governed the lines would still be there, but would be unimportant to the geographer. If the boundaries exist, but are ignored they will not have much effect on the geography of the states involved. If the Common Market experiment was followed to its logical conclusion so that the boundaries between Italy, Germany, France, Belgium, the Netherlands and Luxembourg ceased to function, and the attitude of the people also changed, then the boundaries around the Common Market would still be of importance as geographical divisions, but the effect of the internal lines would quickly diminish.

The Common Market is as yet largely an economic union, but Eastern Europe's connections with the U.S.S.R. are both economic and political. The Soviet Union has tied such countries as Poland, East Germany, and Czechoslovakia to it both in forms of government, and in such things as communications, orientation of industry and markets. Czechoslovakia sells its manufactures mainly within the Iron Curtain states and gets its needs from its fellow Communist countries. Poland has a Communist government and would find it hard to adjust its economy to the states of Western Europe after 20 years of serving the re-

quirements of the U.S.S.R.

The political boundaries of North America are of interest to the geographer wishing to see the effect of such lines. European colonization was of vital importance to the geography of the continent, to take one instance the relief runs from north to south whilst this has largely been ignored in the political decisions of the immigrants. With the exception of the Canada-Alaska boundary the lines between Mexico and the United States and Canada and the United States run from east to west. So-called 'natural' boundaries in North America were only accepted politically when human settlement considered them well suited to the purpose. Man-made and artificial limits were of importance. Quebec province in Canada owes much of its character to the Roman Catholic Church which was active in colonization and moulded much of the landscape, and its boundary with Ontario is of importance in so far as it acts as a division between French Quebec and British and Protestant Ontario. If Canadian election campaigns are any sort of indicator the boundaries of Quebec still have significance for the French-speaking Canadians who make up the majority of the province's population.

Within the United States large areas were formerly either part of the Spanish New World Empire or the Mexican Republic, but have been incorporated into Washington's dominions. And yet few vestiges of the Spanish and Mexican administration remain. Texans are often referred to as 'super-Americans' as they possess more of the characteristics the world has come to associate with the United States. Since the United States-Mexican War of the 1840's the Texan has seemed to be intent on turning both himself and his environment into the most American of the states, as if the nearness to the alien Mexican environment acted as a challenge. To the Texan the boundary

with Mexico is of prime significance. And Mexico is different for here the brilliance of the Precolumbian Mayan, Toltec and Aztec cultures was mixed with the invading Spanish civilization to produce a unique quality which is not found in the rest of North America. Both Canada and the United States are of obvious European origin, but in Mexico of equal importance has been the Indian population.

The cultural influence of Mexico has been driven back to the boundary by the United States and each side of the line a different economy has developed with different settlement patterns, and a different orientation to the transport systems. The western part of the boundary is an arbitrary line which has successfully been superimposed upon the landscape. Somewhat in contrast to this the northern frontier of the Chinese Empire used to be delimited by the Chinese ability to introduce their irrigated agriculture into an area. Where the Chinese could not settle because their technological ability was not adequate to overcome the irrigation problems the lands of the nomadic tribes began. Efforts were made by the Chinese to demarcate this line by building the various Great Walls of China which were not so much for defence as to show the limits of the Chinese dominions. The physical geography of the northern areas limited permanent Chinese expansion until the arrival of the more advanced technology of Europe. With the building of railways the Chinese made rapid inroads into the lands of the Manchu, Mongol and Uighur tribal areas. The Inner Mongolian Autonomous Region of China today has five Chinese farmers for every Mongolian. Outer Mongolia felt the challenge of Chinese expansion during the Nineteenth Century and actively solicited the support of Tsarist Russia and later the U.S.S.R. to counteract it. In 1921 the Mongolian People's Republic was established under Soviet protection. Outer Mongolia has since developed as a satellite of the Soviet Union, an arrangement which

is popular in Ulan Bator. With Soviet support the Mongols stopped the advance of the Chinese at the newly established international boundary, and in 1947 managed to get the recognition of Nationalist China. In 1962 the boundary between Communist China and the Mongolian People's Republic was dealt with in a Sino-Mongolian agreement, the details of which are as yet unavailable. The Soviet Union has followed a policy of encouraging the Mongols to concentrate on their traditional economy of stockraising, and in 1960 over 95% of the Mongolian exports to the U.S.S.R. (by value) were animal products. In contrast to this China has been actively promoting the development of Inner Mongolia as a wheat and cereals area. The Mongolian People's Republic is organised along Soviet Lines whilst Inner Mongolia is rapidly becoming Chinese. What was once an area of Mongol pastoralism has been radically changed by a political boundary (dealt with more fully in Section Seven).

Although, as has been previously stated, each political boundary, like each state, is unique it was felt that there are certain factors which most have in common and in this chapter it is hoped that most of these have been covered. A number of the boundaries dealt with later in this study have been mentioned, but to broaden the interpretation of phenomena related to the boundaries examples from other parts of the world have also been used. China is a totalitarian state with a number of frontiers in the process of changing into effective political boundaries; under such circumstances it is rewarding to look at the political implications of totalitarian government on political boundaries, and to study more mature examples to see what happens when a frontier has developed into a functioning boundary. Similarly, such generalizations as Boggs' and Hartshorne's boundary classifications add to the knowledge available regarding political boundaries. Not only is it impossible to endeavour to answer the two questions posed in this thesis without further

understanding regarding the background of states and political boundaries, but until an effort to procure such an understanding is attempted it will not perhaps be appreciated to what extent the two questions are inter-related. As it is hoped it can now be seen the effectiveness of political influence within the state area is directly related to the extent to which the political boundaries, those lines delimiting the state's jurisdiction, provide a division within the landscape of the boundary area.

SECTION TWO

CHAPTER ONE

The Communist Ideology in a World Setting

Little progress can be made with regard to a discussion of the political geography of China and the surrounding states without knowledge of the Communist ideology. To answer questions relating to the effectiveness of state administrations within the state area, or to try and assess the effect of a political boundary upon the landscape, lacks practicability in Asia unless they are specifically related to a Communist framework. In no continent is Communism more a crucial political factor than in Asia, and, therefore, in this study it is the overwhelming political consideration. Such being the case it was felt necessary to use the first two chapters of this section to look at it more closely, firstly as a world wide political movement, and then to deal with it in an Asian context. Following these two chapters it then becomes more meaningful to describe China as a 'Communist state' with all the implications this involves regarding the neighbouring states.

Karl Marx is always claimed as the ideological father of Communism. Marx was born the eldest son of Heinrich and Henrietta Marx on May 5th, 1818 in Trier in the German Rhineland. At the Congress of Vienna Trier became part of Prussia. Marx's parents were Jewish, but the Prussian government was unsympathetic to Jews and in 1816 passed anti-Jewish legislation which threatened Heinrich Marx's position as a lawyer, so he entered the Lutheran Church in 1817. 'The hostility of ... (Karl Marx) ... to everything connected to religion, and in particular to Judaism, may well be partly due to

the peculiar and embarrassed situation in which such converts found themselves.¹ It seems that the warm friendship shared by Karl Marx and his father led also to a sympathy in ideas. Anyway, Heinrich Marx was much influenced in his ideas by the French Revolution, as were so many intellectuals of his generation, and brought up Karl in the belief that society's future upheavals would depend upon the working classes for their success. It is possible to see in this basic concept an idea which would appeal so strongly to the Chinese peasant's son Mao Tse-tung.

Imbued with the notion that the future belonged to the working classes Marx tried to demonstrate that the great political trends of historic times, for example liberalism or democracy or socialism, in fact corresponded to certain classes of society. As the middle classes had already succeeded to power in most of Western Europe the next logical step was the triumph of the working classes. 'Marx believed that the proletariat, by the natural course of industrial progress and the increase of destitution and exploitation which he supposed went with it, became more revolutionary every day',² so he considered Western Europe was ripe for a working class revolution which would bring the lower strata of society to power.

But before the teachings of Marx could gain the phenomenal international popularity which they have enjoyed during the Twentieth Century they had to be modified with regard to one particular point. Being a Western European Marx thought only in terms of the industrial working classes. It was left to the 1917 Russian Revolution under Lenin to disprove the Marx hypothesis that an agricultural society was unsuited to the needs of a work-

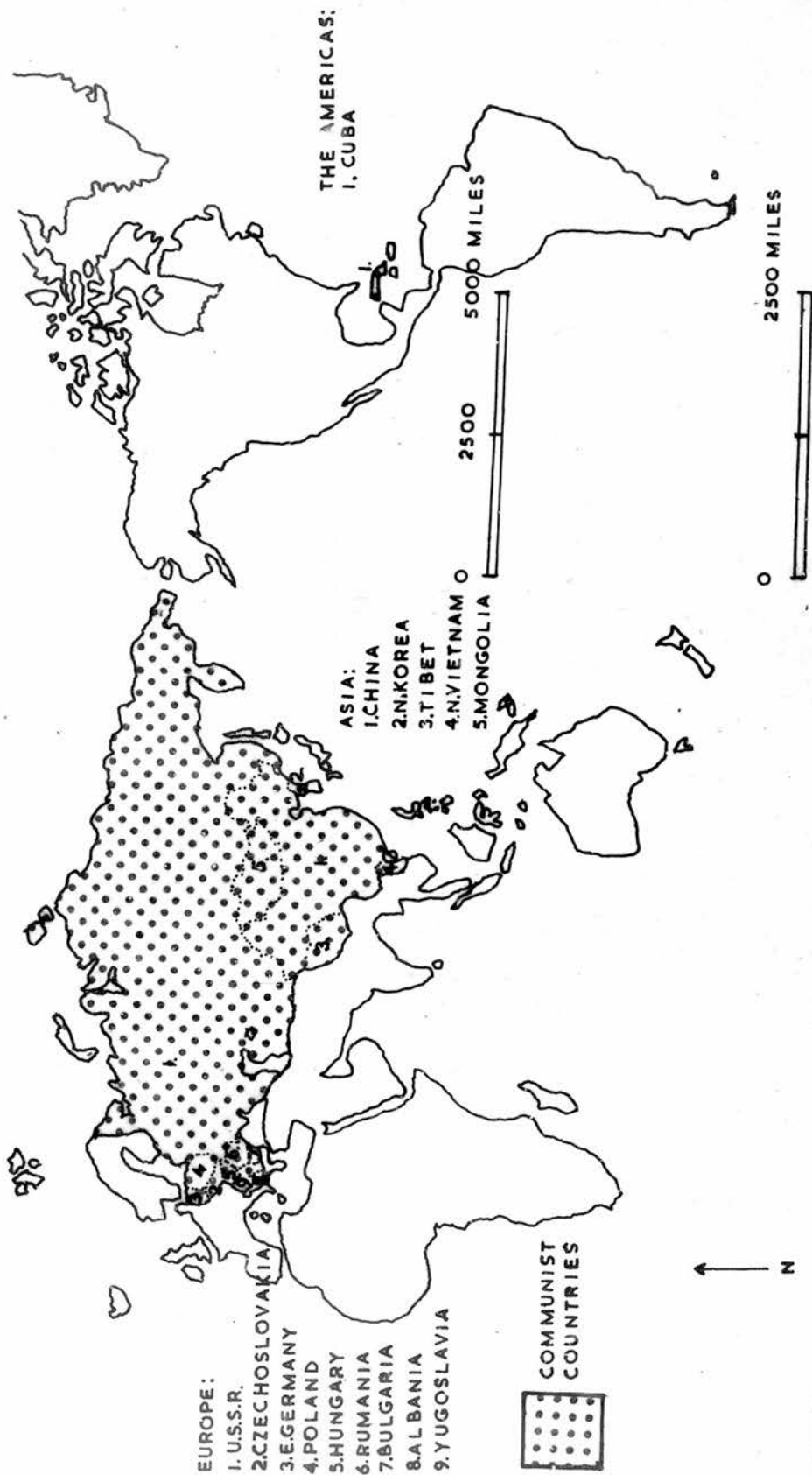
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1. I. Berlin: 'Karl Marx'; Oxford University Press, New York 1959, p. 27.
 2. F. Borkenau: 'World Communism'; University of Michigan Press edition, Ann Arbor 1962, p. 44.

ing class rebellion. Lenin's contention that a peasant economy was just as useful as an industrial one for the needs of a Communist revolution was emphatically confirmed in 1949 by Mao's successes in China.

Stripped down to its bare bones the Marxist-Leninist-Maoist Communist ideology has an appeal which is difficult to challenge. It is most effective in those states where economic contrasts between the classes are the most blatant, the past two notable examples being the Soviet Union and China. In such countries as the United Kingdom the appeal of Communism has been largely negated by the rising expectations, usually fulfilled, of the working classes. Similarly the graft and corruption practised in the China of Chiang Kai-shek prior to 1949, and emphasised by the war with Japan, would have helped any party professing an interest in the harsh life of the bulk of the population. The belief of the Communists that they can improve the lot of a state, both economically and socially, is a simple but effective piece of propaganda for people who are hungry and without a future.

Of significance to the geographer is the unacceptability of all other forms of government to the Communist world. Communist ideology demands the overthrow of other regimes until all the states of the world have Communist administrations. Although the Soviet Union, for example, has the appearance of having abandoned her revolutionary plans this is deceptive. The differences between China and the U.S.S.R. are not in goals, but in methods of achieving such goals. Beginning tentatively in 1956 at the 20th Party Congress in Moscow Krushchev suggested that war might not be inevitable and violent revolution necessary to bring about Communism in the non-Communist states. Mao's China disagrees and states that the world Communist revolution can only be brought about by a clash of arms. Despite the contrast in approach to the geographer what is of greater importance is the sincerely held

MAP I. THE COMMUNIST WORLD



belief that one day all countries will have Communist administrations. Thus where a Communist state shares a political boundary with a non-Communist country the line is also an ideological divide. Such boundaries are often imposed rigidly upon the landscape so that the human geography on either side begins to diverge in character, even where formerly there had been a cultural unity as between the Federal Republic of Germany, and the Democratic German Republic. The imposition of the boundary upon the landscape is most noticeable between the Communist states and those countries supporting the United States' stand in the so-called 'Cold War', but can also take place between Communist and uncommitted states, such as along the Sino-Indian boundary following the 1962 conflict between the two states, or between Communist states as with the Sino-Soviet boundary following the ideological split between China and the U.S.S.R.

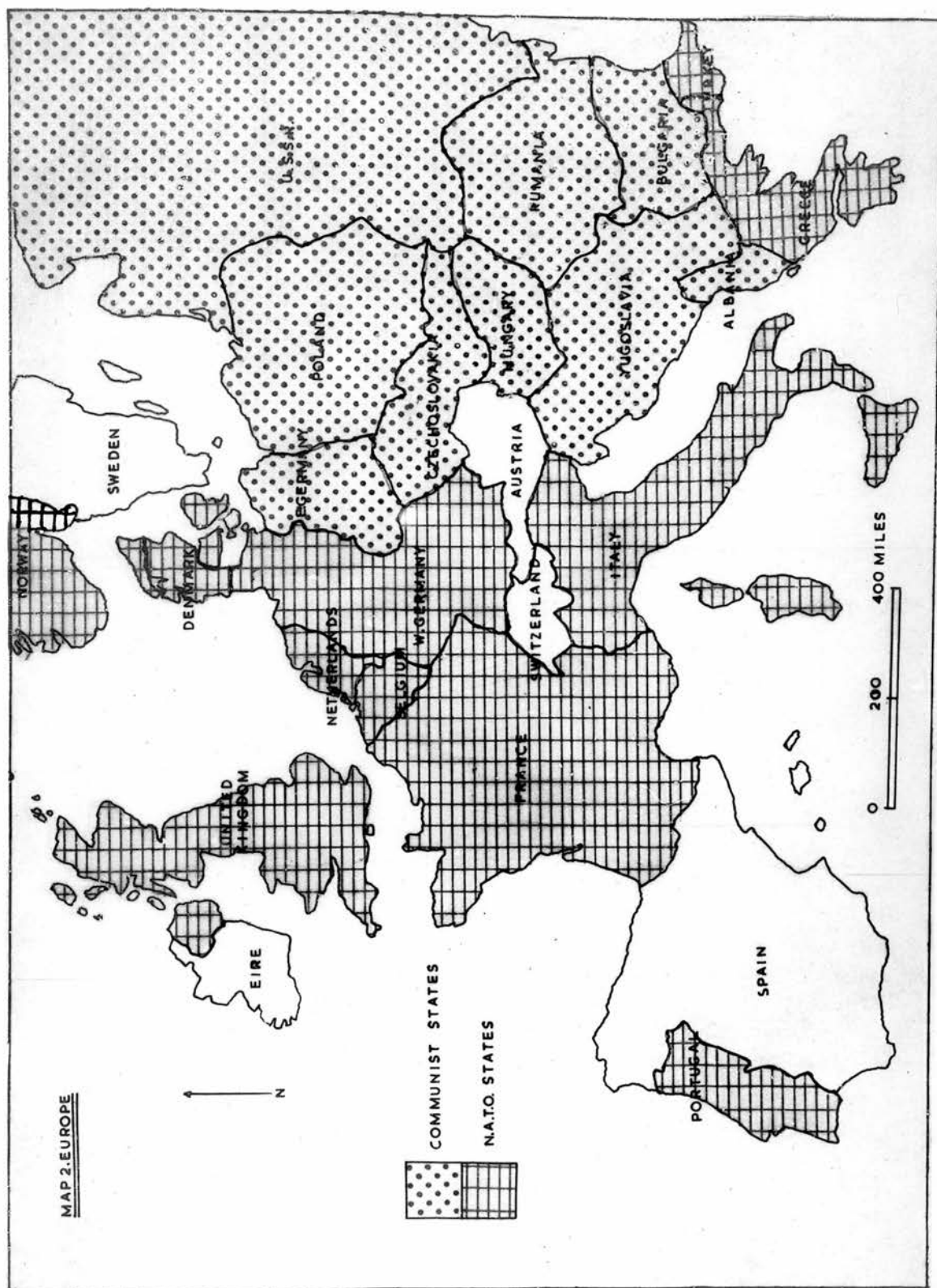
Every state has a quality of uniqueness about it both in its actions and its characteristics, so a map of the Communist world is deceptive in its apparent solidarity (Map I.). Besides the ideological split between the U.S.S.R. and China, much of which can be laid at the door of Russian and Han Chinese nationalism, there are other differences. One of the more interesting ones is whether a state has had a successful revolution, or whether it has had a Communist regime imposed upon it by either the Soviet Union or the People's Republic of China. In the former category is the Soviet Union, China, Mongolia, North Vietnam, Cuba and Yugoslavia. The reason for the Communist regimes in Czechoslovakia, East Germany, Poland, Hungary, Rumania, Bulgaria, Albania and North Korea can be traced to the expansionism of the U.S.S.R. under Stalin during the latter part and after the Second World War. Similarly, the former semi-independent state of Tibet has been made

part of China by military conquest. Yugoslavia, the most independent minded of the smaller Communist states, does not fit easily into either the Chinese or Soviet camps.

Where Communism has been imposed upon the state by either the U.S.S.R. or China there is usually less effective state administration because the majority of the population does not fully accept the situation. The revolts in Hungary and Tibet demonstrate this important factor. Where there has been a successful revolution, as in China, the co-operation of the bulk of the population makes the control of the central authority over the state area initially and increasingly more effective. The geographical impact of the state's political boundaries is limited until either they are imposed upon the landscape by the alien military forces, or the population of the state has accepted the type of government thrust upon it.

Despite these differences within the Communist bloc there are enough similarities to justify a political geographer dealing with the Marxist-Leninist-Maoist states together. Toynbee³ made an interesting comparison between Communism and Islam which helps to partly explain the dynamic nature of the former; 'Like Communism Islam was an anti-Western movement which was at the same time a heretical version of a Western faith; and, like Communism, it wielded a sword of the spirit against which there was no defence in material armaments'. The Communist states of the world tend to believe that the peoples of other countries desire a Communist revolution and it is only the governments with which they are in conflict. This belief that all but the governing elite are awaiting the arrival of the Communist revolution is another factor which leads to an active attitude along many of the bound-

3. A. Toynbee: 'Civilization on Trial'; Meridian Books, New York 1960, p.30.



aries between Communist and non-Communist states, as in Laos, South Vietnam and South Korea for example.

Of the actual distribution of Communist states throughout the world at present (Map I) there is a vast area covering Eurasia from Eastern Europe to the Pacific and from the Arctic Ocean to the Himalayas. To this main bloc can be added the Caribbean island of Cuba. Despite the great publicity given to the United States-Cuba Crisis in 1963 it is along the periphery of the Eurasian Communist bloc that there is the greatest effort to put into action the concept of World Revolution. This might be expected as it is geographically easier to support the Pathet Lao in Laos when China shares a common boundary with the state (and so does North Vietnam), than to effectively equip the sizeable Communist following in Brazil or Venezuela. For example, although the Communist insurrection in the Philippines which began in 1948 had the support of a discontented peasantry and could by 1950 claim an army of 40,000 threatening Manila the revolt was isolated from the Soviet Union and Mao was not fully established in Peking. With American aid President Magsaysay crushed the Philippines' uprising.

Europe provides a useful area in which to study the space relationships between modern Communism and non-Communist states. With regard to Map 2, the criteria for labelling the Communist states is membership of the Warsaw Pact, for having anti-Communist sentiments membership of the North Atlantic Treaty Organisation, and those other states shown are assumed to be uncommitted (although many Communist states would feel that there was no such political stand). This leaves Yugoslavia unplaced, but as Tito's Government professes Communism the state has been included in the category of those within the Warsaw Pact.

With the notable exception of Yugoslavia the Communist states which fringe the Soviet Union's western boundaries are the outcome in their political loyalties of having been geographically closest to the U.S.S.R. at the end of the Second World War when Stalin was putting into practice where he could the overthrow of non-Communist countries by force. It is interesting to note that of the European states which had Communist regimes thrust upon them by the Soviet Union the one which has shown the most independence from the U.S.S.R. in the Sino-Soviet dispute is the one which is the least accessible to Soviet power geographically, namely Albania which has N.A.T.O. committed Greece along the southern boundary, the Adriatic Sea in the West, and shares her other boundaries with the independently minded state of Yugoslavia. Geographically it would be much more difficult for the Soviet Union to bring force to bear upon Albania than it was upon Hungary in 1956.

As is shown in the next chapter N.A.T.O. is not the only non-Communist grouping which has been stimulated by 'Cold War' thinking. The most notable of the other organisations are S.E.A.T.O. and the Central Treaty Organisation, the former operating in eastern Asia and the latter in western Asia. But N.A.T.O. is an excellent example for studying reactions to Communist ideologies and expansionism. Throughout the world in most areas where there is a confrontation between a Communist state and an American backed non-Communist country the differences in ideology affect the geography of the state areas and notably in the region of the political boundary shared by the two states. The well defined boundary between East and West Germany has its Asian counterpart in North and South Korea. The United States is the inspiration behind such world wide efforts to counteract the Communist aim of world

revolution, and organisations such as N.A.T.O. and S.E.A.T.O. represent an attempt to block such expansionism.

Communism is a global movement, an ideology which is active in every continent. Perhaps more emphasis than is desirable has been placed in this chapter upon European examples, but for the political geographer Europe and Asia provide more tangible evidence regarding Communism than the other parts of the world, and so some lack of balance in any world view of the ideology is unavoidable. Nevertheless, although after this chapter the emphasis is upon Asian Communism, it must not be forgotten that it is an ideology which is truly international in its aims. Chinese nationalism may colour Peking's interpretation of the writings of Marx and Lenin, or territorial ambitions dilute Hanoi's, but in one aim the whole Communist structure does provide the appearance of a monolithic unity so dear to Stalin's heart, namely in its desire to convert the rest of the world to its ideology. Whether by peaceful or warlike means this implies that all Communist states are at least latently expansionist, and this affects the political boundary area, more especially if it is shared with a non-Communist country. All Communist states are totalitarian in their form of government, and the central authorities strive to impose their authority throughout the state area quickly and effectively as witness Chinese policy within Tibet.

CHAPTER TWO

Communism in Asia

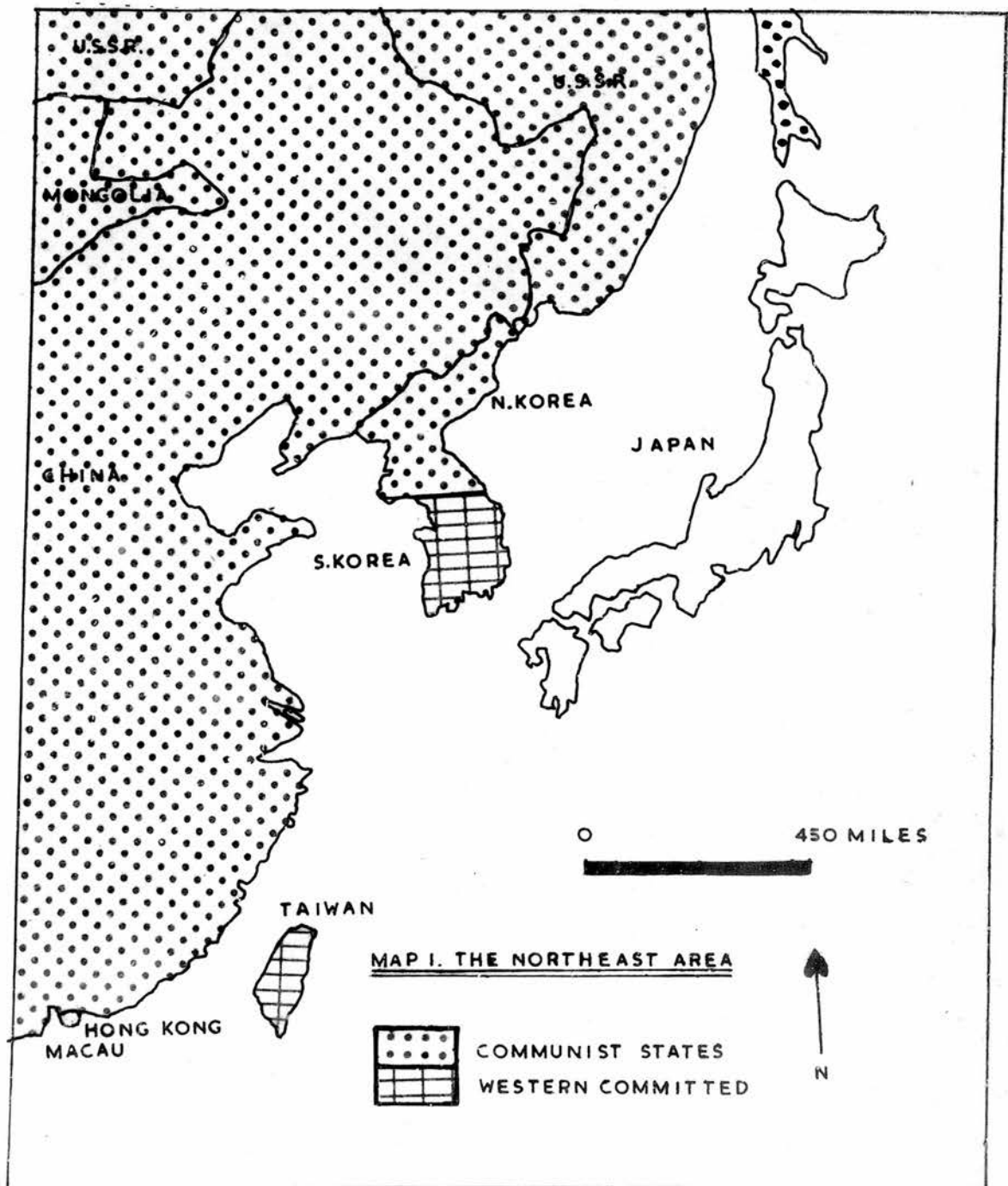
Communism in Asia did not commence with the final success of the Chinese Revolution in 1949. The Russian experience of 1917 profoundly influenced those parts of the continent surrounding China. Korea had its Communist Party by 1925, Japan in 1922, in the 1920's Vietnam's Ho Chi-minh was learning the rudiments of Marxism and Leninism in Paris and Moscow, the 1923 Kuomintang-Communist alliance within China led to the sending of Chinese Communist agents to Malaya, before China had a Communist Party one flourished in Java. The 1930's saw the establishment of Communist Parties in Thailand (1930), the Philippines (1932), and India (1933).

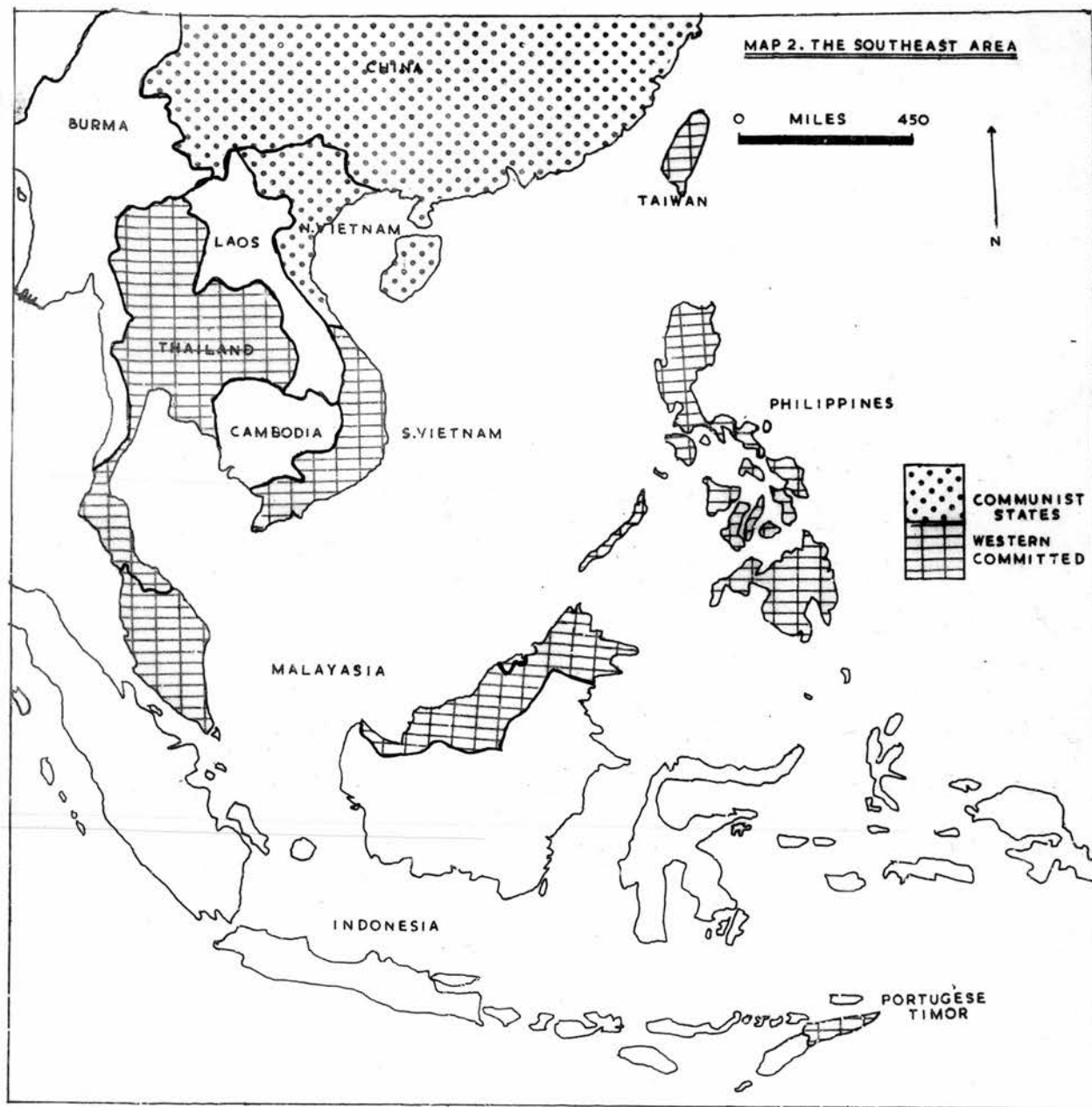
However, Communism in Asia is increasingly dominated by the fact that the Chinese mainland is in Communist hands. The Soviet Union still has immense power and prestige within the continent, but since Peking's role during the Korean War Moscow has tended to be eclipsed by China, although the 1953 purge within the North Korean administration was a belated effort to curb the influence of the pro-Chinese element in North Korean politics.

¹
One American scholar wrote of the Communist victory in China in 1949 'this is probably the most important political and strategic change in the international situation since World War II'. Certainly the space relationships within Asia have been radically affected by the intrusion of an energetically missionising Communist state in the middle of the continent.

Asia is a vast continent and it is easier to divide it into a number of sections to view the space relationships between the various states. This division is an arbitrary one. The Northeast area has the Communist

1. A.D. Barnett: 'Communist China & Asia'; Council on Foreign Relations, published by Vintage Books, New York 1960, p.1.



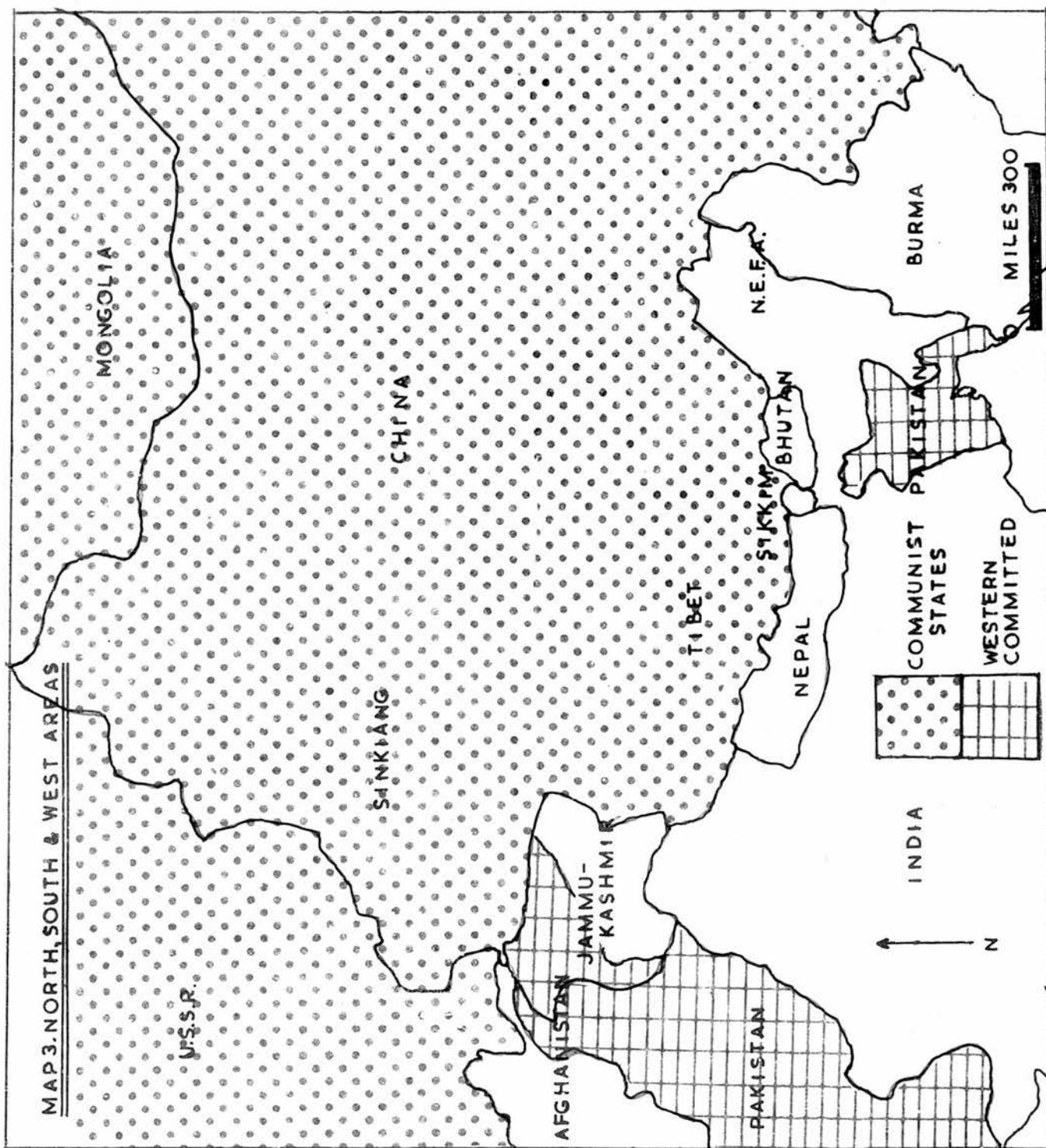


states of China, the U.S.S.R. and North Korea (Map I), the Western committed states of Taiwan (bound tightly to the United States e.g. American aid to Taiwan totalled over 3,000 million dollars between 1949 and 1962), South Korea (similarly dependent upon the United States), the British Colony of Hong Kong, Portugese Macau (Portugal is a member of N.A.T.O.)² and, finally, the uncommitted state of Japan. North Korea has been influenced initially by its proximity to the Soviet Union, and since 1949 by its large neighbour to the north. South Korea retains its independence as a result of American intervention, as does the Nationalist Chinese regime in Taiwan, both of which would hardly seem likely to survive China's aggressive expansionism in the area but for the United States' naval power dominating the Pacific. Hong Kong and Macau are useful to the Chinese as an outlet, but are remnants of a former period. Japan is an uncommitted country which inclines towards the United States in foreign policy and is greatly influenced by the latter in culture and economy.

The Southeast region of Asia (Map 2) has the Communist state of China sharing a boundary with that of sympathetic North Vietnam, and also the neutral countries of Laos (an unsteady neutrality) and Burma. In what was formerly French Indochina Cambodia is uncommitted with regard to the Sino-American conflict in Asia, as is Indonesia farther south. The Philippines and Thailand are members of the American inspired South East Asia Collective Defence Treaty and can therefore be counted amongst the Western Committed states. South Vietnam is dependent upon the United States for survival as an independent country and is unlikely to follow any foreign policy which might offend the latter.

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1. As Macau is a Portugese territory comprising three islands off the coast of China it has not been included in this study, not being a land boundary state with the People's Republic.

MAP 3. NORTH, SOUTH & WEST AREAS



The recently established Malayasia (inaugurated on September 16th 1963) is dominated by Malaya which was under a state of emergency from 1948 until 1960 because the country's stability was threatened by a Communist rebellion, and is therefore sympathetic to the Western cause and anti-Communist. Portuguese Timor can be included in the Western Committed areas. Within the Southeastern area the coming to power of Communism in North Vietnam was helped by proximity to Mao's China and the Communist successes in Laos owe much to that state's position bordering on China and North Vietnam.

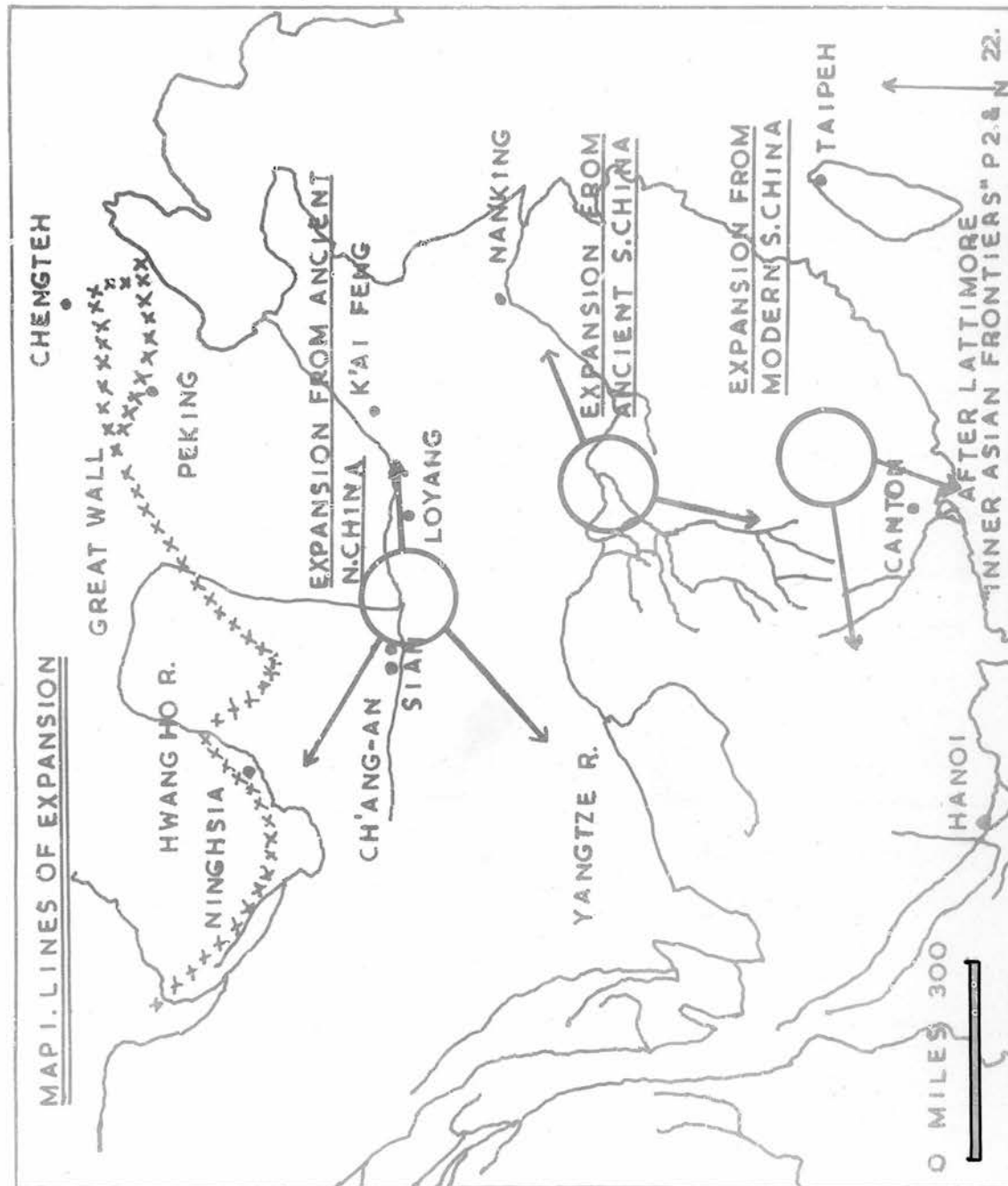
3

North, South and West Asia (Map 3) is dominated by China and India. The Communist state of China is bounded in the north by the Mongolian People's Republic and the U.S.S.R. which in theory is the ideal situation for a Communist regime (i.e. two fellow Communist states as neighbours), but which proves to be more complex than an ideological map would suggest. India, Sikkim, Bhutan, Nepal and Afghanistan are uncommitted in the "Cold War". After the Sino-Indian conflict of 1962 it might have been expected that India would become part of the Western alliances, but such has not been the case. The only Western committed state in the area is Pakistan which is a member of the South East Asia Treaty Organisation and the Central Treaty Organisation. Despite its connections with the United States and Britain Pakistan has of late had amicable relations with the People's Republic of China. With regard to geographical position Mongolia was deeply influenced in its choice of Communism by its closeness to the then young Soviet state and the challenge from non-Communist China. The two great Asian powers of China and India sharing a boundary also produces a political instability in the border areas, as does Pakistan and India's dispute over Kashmir.

3. The Arab countries have not been included in Asia.

Asia today is dominated by Communist China's incomparable geographical position in what is roughly the centre of the continent. China has a traditional prestige throughout Asia which is not enjoyed to the same extent by the Soviet Union or the United States. Much of Asia has grown used to paying its respects to China as the centre of the civilized world. Added to its excellent geographical location, and traditional prestige in Asia China also has a missionizing ideology. In 1957 Mao Tse-tung⁴ stated before the Supreme Soviet of the U.S.S.R. 'in the end the socialist system will replace the capitalist system. This is an objective law independent of human will. No matter how hard the reactionaries try to prevent the advance of the wheel of history, revolution will take place sooner or later and will surely triumph'. The Chinese believe in World Revolution and take every opportunity to promote it. Inevitably those states in Asia with non-Communist governments and closest to China's boundaries geographically are often deeply affected by the latter's beliefs. Similarly, those states which have been most successful in promoting unity within the state area and have the most effective administrations domestically are less affected by China's ideologies than those states where the influence of the central authority is less than satisfactory throughout the state area (e.g. South Vietnam). Where there has been an effective anti-communist administration countering Chinese ideological expansion the common political boundary had developed as a dividing feature in the landscape.

4. Mao Tse-tung: Speech quoted in 'Current Background', No. 480, for November 13th, 1957, p.5.



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"INNER ASIAN FRONTIERS" P. 2 & N. 22.

CHAPTER THREE : CHINA

1

The Historical Background

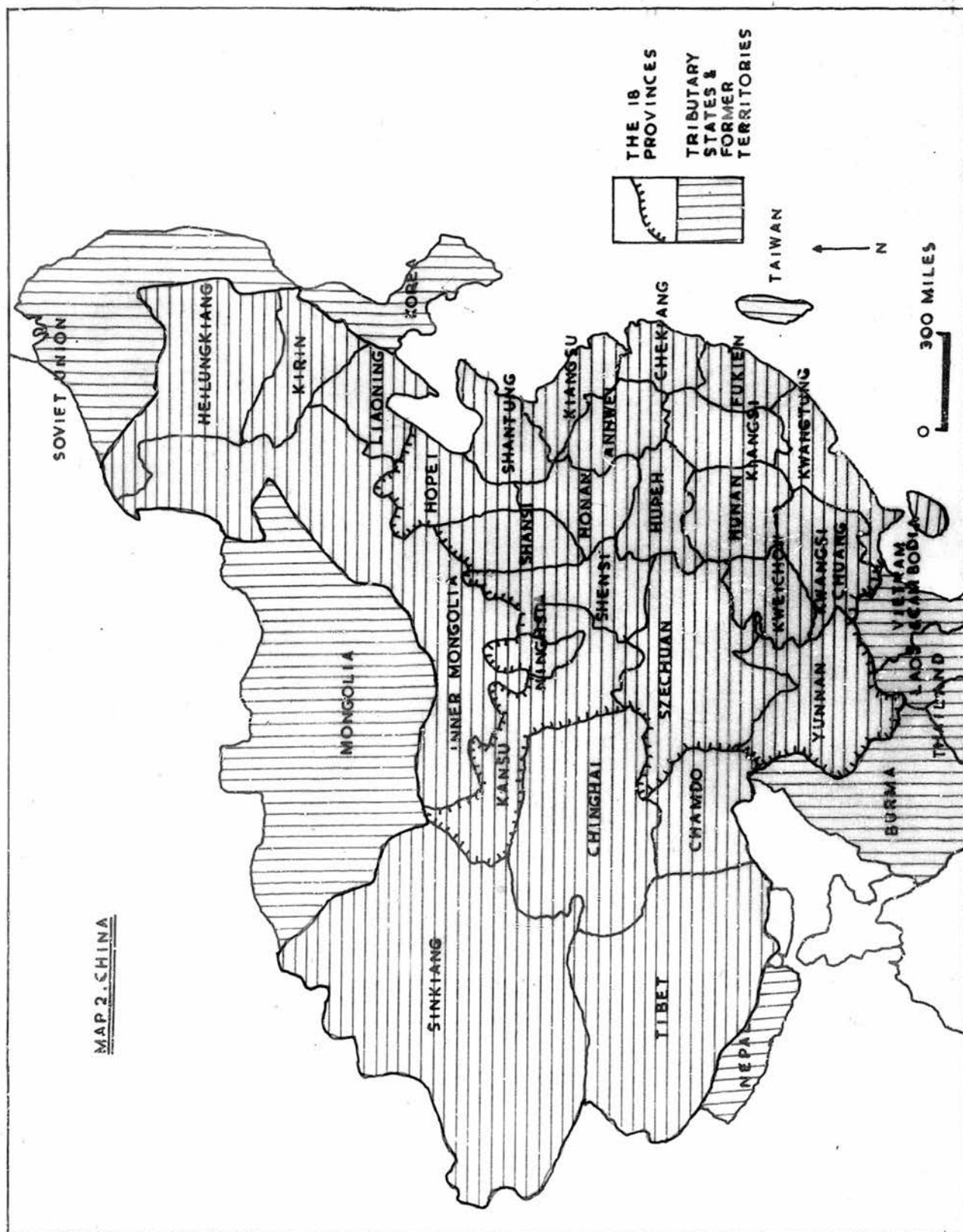
There are few states in the modern world which are more influenced in their present outlook by past historical experience than China. The Chinese of the mainland adhere to the Marxist ideology, but it has been modified and adapted to Chinese conditions. Although it is possible to view an action such as the Chinese conquest of Tibet after 1949 as Communist world revolution being put into effect in fact the situation is far more complex than that. Tibet was a tributary state of China under the last Ch'ing Dynasty which collapsed in 1911, and this historical fact colours the present Peking administration's attitudes towards Tibet as much as Mao's belief in world revolution by armed force. As history intrudes so much into present Chinese political attitudes and actions it was felt necessary to commence a discussion of China's characteristics with a brief outline of the state's development.

2

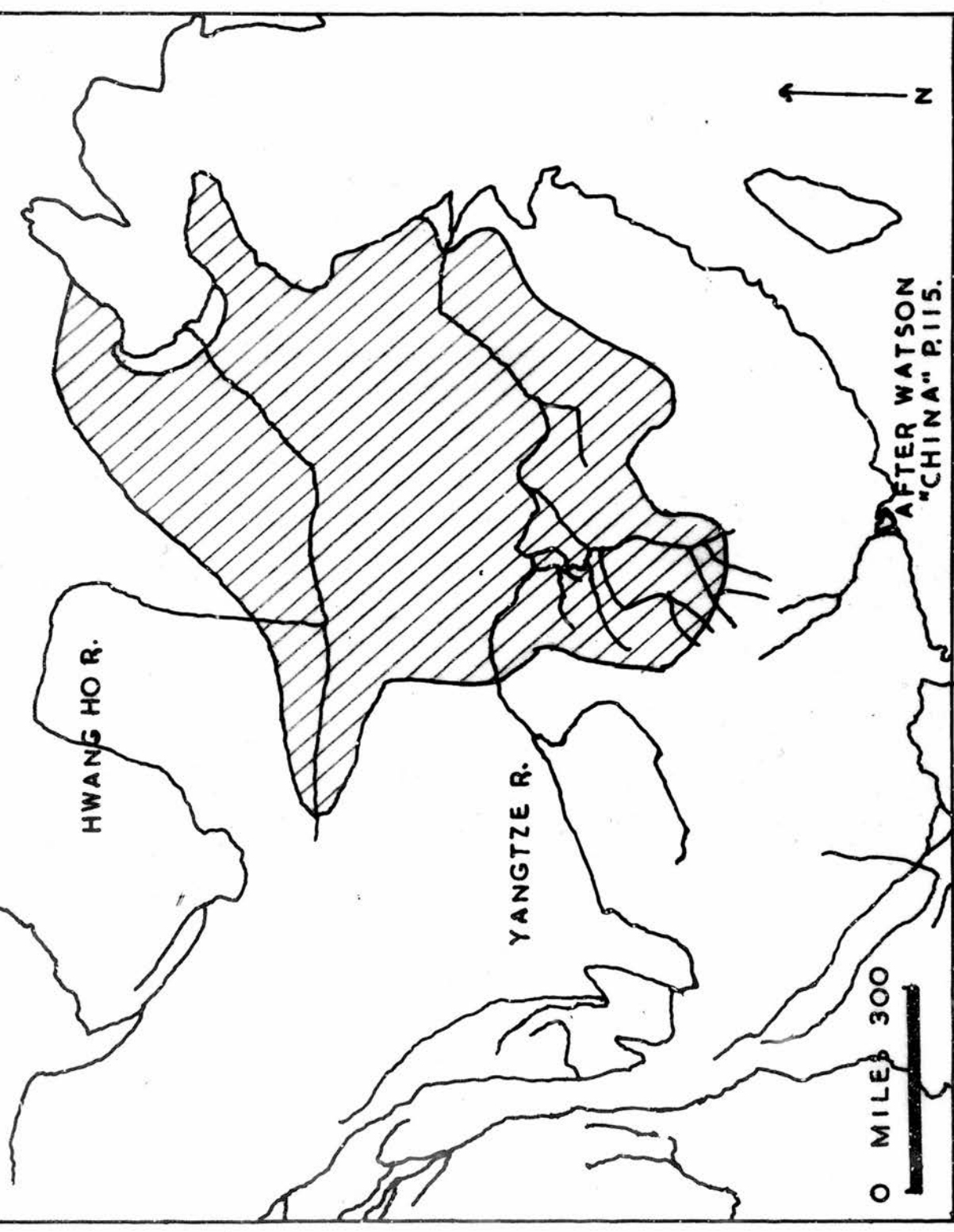
It appears probable that there were two foci in the early development of Chinese civilization, namely in the Middle Yellow River Valley and the Middle Yangtze Valley (Map 1). Of these two areas initially the northern one was the more significant, but the impressive drive to the south by the Chinese

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1. The following have been of importance in the writing of this part of the thesis: D.Bodde: 'China's Cultural Tradition'; Rinehart, New York 1956; W.T. de Bary: 'Sources of Chinese Tradition'; Columbia U.P., New York 1960; W.Eberhard: 'A History of China'; Routledge & Kegan Paul, London 1950; C.P.Fitzgerald: 'China, A Short Cultural History'; Praeger, New York 1950; L.C.Goodrich: 'A Short History of the Chinese People'; Harper, New York 1950; O.Lattimore: 'Inner Asian Frontiers of China'; Beacon Press edition, Boston 1962; & Y.L. Liang & N.Whyment: 'China'; Macdonald, London 1946.
 2. Lattimore (O.): 'Inner Asian Frontiers of China'; p.27.

MAP 2. CHINA



MAP 3. THE CHOU EMPIRE



0 MILES 300

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"CHINA" P.115.

HWANG HO R.

YANGTZE R.

that transformed the Yangtze area from the original Southern China into Mid-China did much to change their relative importance. The civilization was based on irrigation, which helps to explain the difficulty the Chinese had to expand beyond the Great Wall frontier where conditions did not favour such agriculture.

Ignoring the early Hsia and Shang cultures of northern China, both shrouded in myth and legend, it is perhaps best to commence this summary of Chinese history with the Chou period (about 1100 to 249 B.C.), the era which is somewhat easier to decipher than the prior cultures. Initially the Chou capital was in Shensi (Map 2), but in the Eighth Century B.C. it was moved into the Great Plain. The Chou Empire (Map 3) was a feudal state, with the ruler distributing all fiefs and favours personally. The nobility was above punishment, although there was a code of honour in which suicide played a prominent part. The religion of the state was a form of ancestor worship in which the ruler became a sacred symbol as the 'Son of Heaven'. Possibly the greatest weakness in the system was the reliance upon the ruling caste where there was a need for men of worth in numbers it was increasingly difficult to satisfy.

By the time the Chou capital was transferred from Loyang in northwest Honan the power of the Chou Dynasty was in decline. The age of the Eastern Chou can be divided into two periods, from 772 to 482 B.C., and from about 484 to 221 B.C. The first period saw the absorption of the small feudal states surrounding the now powerless monarchy by the more successful of their fellows, and the next period is usually known as the 'Age of the Warring States'. What is important for the political geographer regarding this early period of Chinese history is that, except when internal strife sapped its strength, the Chou Empire was expansionist, may well have begun to develop a rudimentary form of nationalism amongst its elite due to a culture which was superior to that of

the surrounding areas, and had a not unimpressive political structure within the state. The Chou was followed by the Ch'in Dynasty (221-207 B.C.).

Whilst other feudal states fought amongst themselves the Ch'in in the northwest remained aloof and concentrated on building up its own strength. The outcome was an organization not dissimilar from Sparta with every man liable to military service throughout his life, and the military receiving preferential treatment. The other feudal states fell easy victims to the Ch'in armies. For the first time the title 'Emperor' was used, instead of 'King'. Although the Ch'in Empire never survived the second Emperor the whole system of administration was overhauled with the abolishing of the feudal states and the division of territory into provinces. The armies were used to drive the Huns from the great bend of the Yellow River and much of the Great Wall was constructed. In 210 B.C. the Emperor Ch'in Shih Huang Ti died to be succeeded by his inept son. The regime crashed, but it had managed to unify the Empire, introduce a standard system of currency, weights and measures, and start a line of dynasties which lasted until 1911 A.D. During Ch'in times Chinese armies reached North Vietnam.

Although the Ch'in Empire was brief its importance to later Chinese history was vast. For the first time the Chinese acknowledged the imperial outlook of their regime and, as if an omen for the modern world, began taking an interest in alien lands as far away as North Vietnam. Feudalism was abandoned and much of the administration throughout the state area standardised.

The ensuing Han Dynasty (202 B.C. - 220 A.D.) has frequently been referred to as the 'Golden Age of China'. The first Han Emperor Kao Ti started life as a peasant called Liu Pang. Under the Emperor Wu Ti (140-87 B.C.) the Western Han entered upon an era of territorial expansion. Korea was incorporated into the Empire, the southern areas of China were brought firmly

under the Imperial rule and the threat of the Huns (Hsiung-nu) actively counteracted. Contact was made with the Roman Empire and India. Despite the achievements of Wu Ti's reign already signs of decay at Court showed themselves (eunuch intrigue, royal parasites). An early experiment in 'Communism' was made under Wang Mang who had gained the throne by devious means. He seized all estates and then divided them amongst the peasants. Wang Mang's reign lasted from 9 to 25 A.D. when he was defeated by Liu Hsin who became the first of the Eastern Han Dynasty as Emperor Kuang Wu ('Eastern Han' signifies that the state capital was transferred from Ch'ang An to the more easterly Loyang (Map I).

With some justification the Chinese like to point out that they were already experimenting with a form of Communism by the first century A.D. under Wang Mang. Perhaps more important with regard to the early Han Dynasty is that the tradition of territorial expansion during times of internal strength was already well established. Tenuous contact was even made with the Mediterranean, although it would be dangerous to overstress this fact as it would be to claim that Africa was under British control at the beginning of the Nineteenth Century because Landor had discovered the source of the Niger. However, by the first century A.D. the Chinese had firm control over the northern Hwang Ho area and the southern Yangtse area, and had nominal control of Korea.

The first Eastern Han Emperor was a Confucian scholar, but under Ming Ti an embassy was sent to India in 61-67 A.D. which officially introduced Buddhism into China. Buddhism revived the Taoist beliefs and in later years the two religions became rivals (it must be realised that the spread of Buddhism in China was very slow, both because of the alien environment and the primitive communications). The Han Dynasty began its inevitable decay and perished in bloody strife between the adherents of the then Emp-

press and the Court eunuchs. The Emperor survived only to fall into the hands of one of his three rivals. The Empire that stretched somewhat tenuously to the Pamirs by 97 A.D. degenerated at its core. General Ts'ao Ts'ao seized the Emperor and his son and set up a kingdom based on Loyang in the north named Wei, whilst the south was divided between the dynasties of Wu under Sun Ch'uan, and Han under Liu Pei. A general of the Wei managed to unify the three states (the Chin Dynasty, 265-313 A.D.), but with only limited success.

The Mongolian and Turkic tribes of the north pillaged the capitals of Ch'ang-an and Loyang in 311 and 316 A.D. and the Chin Dynasty was forced south, eventually setting up the capital at Nanking. Until the Sixth Century China was again divided into North and South. In the North the Toba Tartars set up the Northern Wei Dynasty (386-535 A.D.), later using Loyang as their capital. In 420 A.D. the Chin Dynasty was overthrown in the South and in the Sixth Century the Northern Wei rule broke up.

By the 580's the Northern Chou had united North China. A general Yang Ch'ien deposed the child emperor and began the short lived Sui Dynasty (589-618 A.D.) which united the North and South once again. The Sui rule was weak and fell before its rebellious subjects. This provided the opportunity for an amazing man Li Shih-min to place his father Li Yuan on the throne in Ch'ang-an as Emperor Kao Tsu. So began the T'ang Dynasty (618-907 A.D.). Despite his being the younger son Li Shih-min became Emperor in 627 A.D. Victories against the Turks under their leader Qadir who had pestered the Chinese frontier areas for a number of years led to the acquisition of Inner Mongolia in the second quarter of the Seventh Century. After the initial successes of the T'ang Dynasty there followed a gradual decline. The Examination System was fully established and the Islamic rel-



igion introduced, but too much power eventually came into the hands of the military governors, more especially in the borderlands. General Chu Wen murdered the last of the T'ang Emperors and founded the Liang Dynasty (907-923 A.D.), but his son was overthrown by the Turkish general Li K'o-yung who became Emperor of the Later T'ang Dynasty (923-936 A.D.). With the aid of the Kitan Tartars the Later Chin Dynasty ruled from 936 to 947 A.D. There followed the Later Han (947-951), and the Later Chou (951-960). Throughout the troubled period which began with the decline of the T'ang Dynasty China's limitations as a cohesive state are well demonstrated. Notable amongst these 'forces for disintegration' is the problem of an inadequate transport system, more especially in the frontier areas which were thereby even harder to stabilise. With a dictatorial form of government it becomes especially important that control is effective in those areas furthest from the centre of administration or those provincials with an abundance of local power are tempted to challenge the distant overlord. Similarly, the traditional division between North and South China would have been at least partly counteracted by the transport network if it had equalled the efficiency of the contemporary Roman one. The threat from the frontier in the north which the nomadic tribesmen presented to the Chinese state might also have been negated by a transport network such as the Roman which permitted the rapid dispatch of troops and equipment to areas of danger. Having apparently noted the lesson of history the present Chinese administration has put much effort into constructing an adequate transport system to tie more closely border areas such as Tibet and Sinkiang to the central authority.

The Sung Era began in 960 A.D. when General Chao K'uang-yin was proclaimed Emperor by his fellow officers. The Dynasty lasted until 1280 A.D. Despite an impressive cultural flowering the Sung period was something of a

failure. From the beginning it was dominated by 'barbarians'. The power of the Kitans in the north was never effectively curbed, and in the north-west the Tunguts carved out a kingdom for themselves. The Nuchen Tartars set themselves up as the Kin Dynasty and ravaged the North in the Twelfth Century, and once again China was divided with the Kin Tartars ruling the region north of the Yangtze and the Sung maintaining itself to the south with the capital at Hangchow. The harmony achieved between the two Empires was shattered by the arrival of the Mongols. The Kin were mauled by Jenghiz Khan (1162-1227 A.D.), but whilst they were engaged in fighting the Mongols after the death of Jenghiz Khan (there are a number of spellings of this name) the Sung armies reoccupied K'ai-feng and Loyang. Soon, however, the armies of the Sung Dynasty were reeling before the might of Ogotai's Mongols. Ogotai died in 1241 and his grandson Mangu in Szechwan in 1259, but his other grandson Kublai completed the Mongol conquest of China.

Until the coming of European seapower, which was of dominant importance to China from the Nineteenth Century onwards, the problems of the Sung Dynasty with regard to the frontier zones typify the situation which prevailed when the state was in a period of comparative weakness. The challenge to China's political unity came either from the northern frontier or from Sinkiang. With the deterioration in Sino-Soviet relations there may yet be a reversal of the modern situation so that the greatest challenge to China is once more from the north; at present the presence of American naval power in the Pacific continues the situation which has prevailed since the Nineteenth Century. During the Sung period the political administration was never effective enough to produce unity throughout China, and there was not even firm

control over the Eighteen Provinces (Map 2) which have been traditionally regarded as Han China (the centre from which Chinese expansion moved outwards). Until the advent of Communism China has represented a culture more than a state, and it has only been during periods of exceptionally strong government, often alien, that any form of unity has been imposed upon much of the area now regarded as China. This problem of the basis for Chinese unity is dealt with more fully later in this chapter when geographical distributions are described.

Under the Mongol Yuan Dynasty (1280-1368 A.D.) the Chinese Empire once more expanded its boundaries. Korea and Burma became vassal states. In 1294 Kublai died to be succeeded by a series of weak rulers. A rebel leader named Chu Yuan-chang placed himself at the head of some of the discontented factions in China, and managed to gain the support of the pirate Fang Kuo-chen. In 1367 Chu assumed the title of Emperor Hung Wu and marched on the capital to claim the throne.

The Mongols were alien, but perhaps of greater significance they endeavoured to rule without using the traditional governing classes of China. Whilst there were men of outstanding ability the Mongols could dominate China, but a weak ruler provided the Chinese elite with an opportunity to usurp the throne and regain power. The Ming Dynasty made much of its claim to being 'Chinese', but this meant more that it was 'Chinese' in culture than its rulers were Chinese in birth. The Mongol Yuan Dynasty had committed the unforgiveable sin of refusing to give up its alien ways, and had even counter-acted Chinese influences by using Turkic administrators throughout the state area.

The Ming Dynasty (1368-1644 A.D.) initially maintained the territorial expansion of the Mongols. In 1421 Peking once more became the capital, as

it had been under Kublai Khan. The choice of Peking, rather than some more southerly centre such as Nanking (Map I) has usually implied that the administration is more interested in the problems or advantages offered by an emphasis upon the northern frontier. Thus, with its close ties with the Soviet Union following the Revolution of 1949 it was predictable that the Communist government should choose Peking as its capital, whilst the previous Nationalist (Kuomintang Party) government of Chiang Kai-shek had favoured Nanking as the sea connections of the administration, notably that with the United States, predominated. During the Fifteenth Century most of Indochina (Map 2) was under Ming rule, and contact was made with Java, Sumatra, Ceylon and Aden, but these short lived adventures always took second place to the northern frontier. The zenith of Ming power was under the Emperor Hsiao Tsung (1488-1506), after which a decline began. The challenge came from the northern frontier area. By 1619 Nurhachu had conquered Manchuria with his Nu-chih Tartars, and had invaded the Liaotung Peninsula. Rebellions within China and an appeal from the Imperial General Wu San-kuei for aid gave the Manchus their opportunity. The new Dynasty was proclaimed in the North in 1644, although the South was still in the hands of the Ming Emperor. By 1650 Canton had been captured. In a manner not dissimilar to Chiang Kai-shek's exit to Taiwan one of the Ming leaders, Cheng, fled to the island and there set up a rival 'China'; the Manchus lacked the naval power needed to storm Formosa and Cheng had not the military power to retake the mainland. Later generations acknowledged the Manchu power and Taiwan was united with the rest of China. Under K'ang Hsi (1662-1723) the Empire was once more extended to include Turkestan and Tibet.

Later Nepal and Burma had to pay tribute to Peking. It is possible to divide the Ch'ing Dynasty into two parts marked by the abdication of Ch'ien Lung in 1796, after which the now notorious decline in Imperial China became quite obvious to the European powers. In 1842 there was the 'Opium War' with Britain marking the beginning of European Imperialism in China, in 1851 China was subject to the Taiping Rebellion, 1894 saw the war with Japan over Korea, and 1900 the Boxer Rising. In 1911 the Republic of China was proclaimed.

The Manchus were culturally absorbed by China, but neither the Chinese nor their ruling Dynasty were mentally prepared for the shock of a much superior European technology. Despite an early expansion outwards the Chinese were fully convinced of the superiority of their way of life and contact with Europeans meant nothing until the arrival of the latter in much larger numbers during the Nineteenth Century. The Chinese were used to military defeats as they had a history of such occurrences along their northern frontier, but they had been always at the hands of nomadic tribesmen with an inferior culture. Similarly the challenge to the Chinese state, whatever its territorial dimensions, had always been from the land frontiers, and never by sea. The Chinese came out of the Opium War in 1842 not only defeated militarily, but also shaken culturally and strategically. Any Chinese administrator knew that if the state was weak the answer was to permit the alien dynasty to gain power and then absorb it culturally, in much the same manner that the Chinese in their expansion southwards from the Hwang Ho had absorbed the tribes so that later generations became 'Chinese'. But the Europeans not only hit upon the novel idea of attacking from the sea, but also were culturally too sophisticated to be absorbed. For the first time in their history the Chinese discovered that their own culture was in danger of being modified by the 'barbarians'. This produced a revolutionary flavour to

Chinese society and it is surprising that the Manchu Dynasty did not fall 20 years before it actually did.

One of the dominant personalities in the downfall of the Dynasty was Dr. Sun Yat-sen who had received a European education in Honolulu, Canton and Hong Kong, and thereby appreciated more fully the need to accept Western innovations rather than resist them. In 1892 Dr. Sun started the Regenerate China Society in Macau, and in 1895, launched his first uprising against the Manchu Dynasty in Canton. Throughout Sun's agitation it is southern China which is the challenge to the Peking administration. This agitation re-emphasised the differences between north and south China which had led to two Chinese states previously in history. To counteract the revolutionary mood of much of the country in 1898 the Emperor Kuang Hsu had tried to inaugurate a number of reforms only to be frustrated by the Empress Dowager, which probably sealed the fate of the Ch'ing Dynasty. In 1905 Sun's Brotherhood Society was founded in Tokyo, and this was later the core of the Kuomintang Party (the Nationalists) which provided the support for Chiang Kai-shek. With the collapse of the Ch'ing Dynasty on January 1st, 1912, Dr. Sun became President of the Republic of China, but resigned on February 23rd in favour of Yuan Shih-kai, eleven days after the formal abdication of the Manchu Emperor.

Yuan was a reactionary with a desire to follow the traditional Chinese pattern and set up himself as the first of a new dynasty. He led a series of attacks against Sun's Kuomintang Party. In 1915 Yuan proclaimed himself Emperor, but was frustrated in his attempt and died in 1916. Yuan's death was followed by a scramble for power amongst the warlords, the most successful being those farthest from the influences of the central government, notably those on the frontiers of China. During this period Dr. Sun, al-

ways much more aware of the happenings in the rest of the world than the traditional Chinese elite, began modelling the Kuomintang upon the Russian example. In 1925 Dr. Sun died.

The new territorial challenge to China again came from the sea. The new power in Asia during this period was Japan. China, weak with civil strife, provided the ideal working ground for Japan's ambitions. Japan gave both financial and moral support to a number of the northern warlords fighting against the Central Government. At the end of the First World War the Republican Government had no control over those areas of the country to the north of the Yangtze. (Map I). The Japanese use of both the northern warlords, and later invasion from the sea, combined the traditional challenge to China's unity with the newer phenomena of naval power.

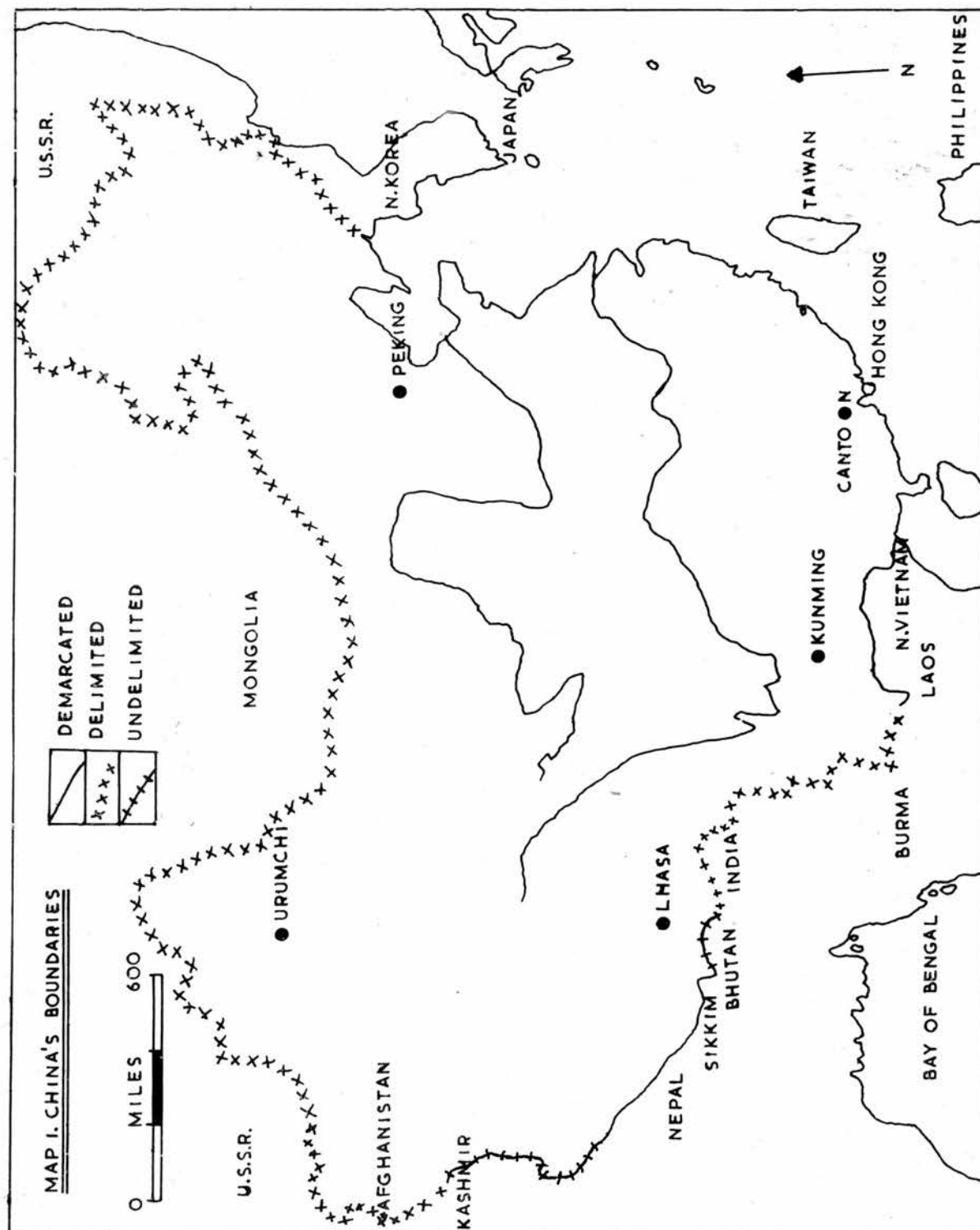
It is during these troubled times that the Chinese Communist Party first appears. In 1924 the Chinese Communist Party became a member of the Third International, and had a brief alliance with the Kuomintang Party which was emerging as the dominant force in Chinese politics. In 1927 the Kuomintang leader Chiang Kai-shek began a persecution of the Communists at a time when he was leading the Chinese armies on the Northern Expedition against the warlords (1926-28). In 1927 Nanking once more became the Capital. The success of the Kuomintang led to a retreat of the Chinese Communists to northern Shensi (Map 2).

The Kuomintang successes within China spurred Japan into action before unity was achieved, and on September 18th 1931 Mukden, the capital of Liaoning (Map 2) was occupied as a prelude to the conquest of Manchuria. In 1932 Japan attacked Shanghai, and in 1937 began a full invasion of China. With the war against Japan (1937-45) came the failure of Chiang Kai-shek's regime

to impose unity throughout China. The strife assisted the rise of the Communist Party, and in 1949 the fugitives of the 1920's became the new rulers of China. Emulating the Ming refugees the Nationalist (Kuomintang) 'Dynasty' retreated to Taiwan, its independence guaranteed by American naval power.

The history of China has a certain regularity. New administrations come to power, achieve some sort of state unity (usually with reference only to the Eighteen Provinces) which is used for territorial expansion into peripheral areas such as Mongolia or Sinkiang or even Vietnam, followed by a period of stagnation and then decline. This decline is then challenged by another 'Dynasty' which may be Chinese or alien, and the next government then follows the same pattern. However, the Communist regime is different. For the first time the Chinese have acknowledged fully a need to accept both a Western ideology and technology. The Kuomintang was too heavily committed to the conservative elements in Chinese society to be able to abandon the traditional belief that the Chinese way of doing things was superior to anything the 'barbarians' had to offer. Armed with a belief in the importance of accepting Western technology, and a determination to weld China into a single political unit with its focus upon Peking, Communist China should defeat the forces for disunity in the Chinese cultural area whilst at the same time equipping the state with a modern enough economy to resist challenges from the outside. The Chinese state is being centralised by the development of a comprehensive transport and administrative network, the frontier areas are being developed and formalized into political boundaries by treaty, and the heir to the expansionist 'Celestial Empire' now has a missionizing ideology which provides a zeal for conversion amongst the bordering states. Looking at China in the past it is possible to suggest that political unity was never successfully imposed upon the state area, whether it was just the

Eighteen Provinces or included frontier zones such as Manchuria, Mongolia, Sinkiang and Tibet. When it had its strongest central government China was little more than a federation of areas. And the farther away from the centre of government an area was the less effective was the administration. The frontier zones were never fully incorporated into the state area, even where there was a formal boundary delimitation as between Tsarist Russia and Manchu China. Today Peking's administration in a frontier area such as Tibet is increasingly well established, with all regional opposition crushed and, as will be seen later in this chapter, many geographical distributions modified.



Physical Characteristics of China

The extent to which the political administration at Peking can carry out effective government throughout China's total area is influenced by the physical geography of the state. In an economically underdeveloped country such as China the limitations of the transport network in particular makes such factors as the rainy season, or desert and mountain terrain, of significance to the central government. Similarly a political boundary running through an area of rain forest a thousand miles from Peking is more difficult to reach than such a line running through grassland five hundred miles from the centre of government. To administer an area up to the boundary means that the government must have reasonable access to it from the rest of the state territories, and such access is often dependent within contemporary China upon the physical geography. As the nature of the physical geography of China is considered a factor affecting notably the ability of Peking to effectively administer the state area various aspects of phenomena such as terrain, climate, vegetation and soils are dealt with in the following pages in general terms.

Excluding islands China's boundaries cover about 16,250 miles (Map I). Extending from latitude 4 degrees N. to 53 degrees N. China has a north-south maximum measurement of approximately 3,440 miles. West to east the state extends from longitude 73 degrees E. to 135 degrees E. (3,125 miles). As will readily be appreciated China is territorially a large state to administer, and

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1. The following texts have been of particular value in the writing of this section: L.H.D.Burton: 'China: The Land & the People', Oxford U.P. London 1929; Cressey (G.B.): 'China's Geographical Foundations', McGraw-Hill, New York 1934, & 'Land of the 500 Million', McGraw-Hill, New York 1955; Jen (Y): 'A Concise Geography of China', Foreign Languages Press, Peking 1964; Lee (S.T.): 'The Delimitation of the Geographic Regions of China', Annals of Assoc. of Amer. Geographers, vol.37 for 1947; Naval Intelligence Division: 'China Proper', Vol.I, 1944; & Shabad (T): 'China's Changing Map', Praeger, New York 1956.

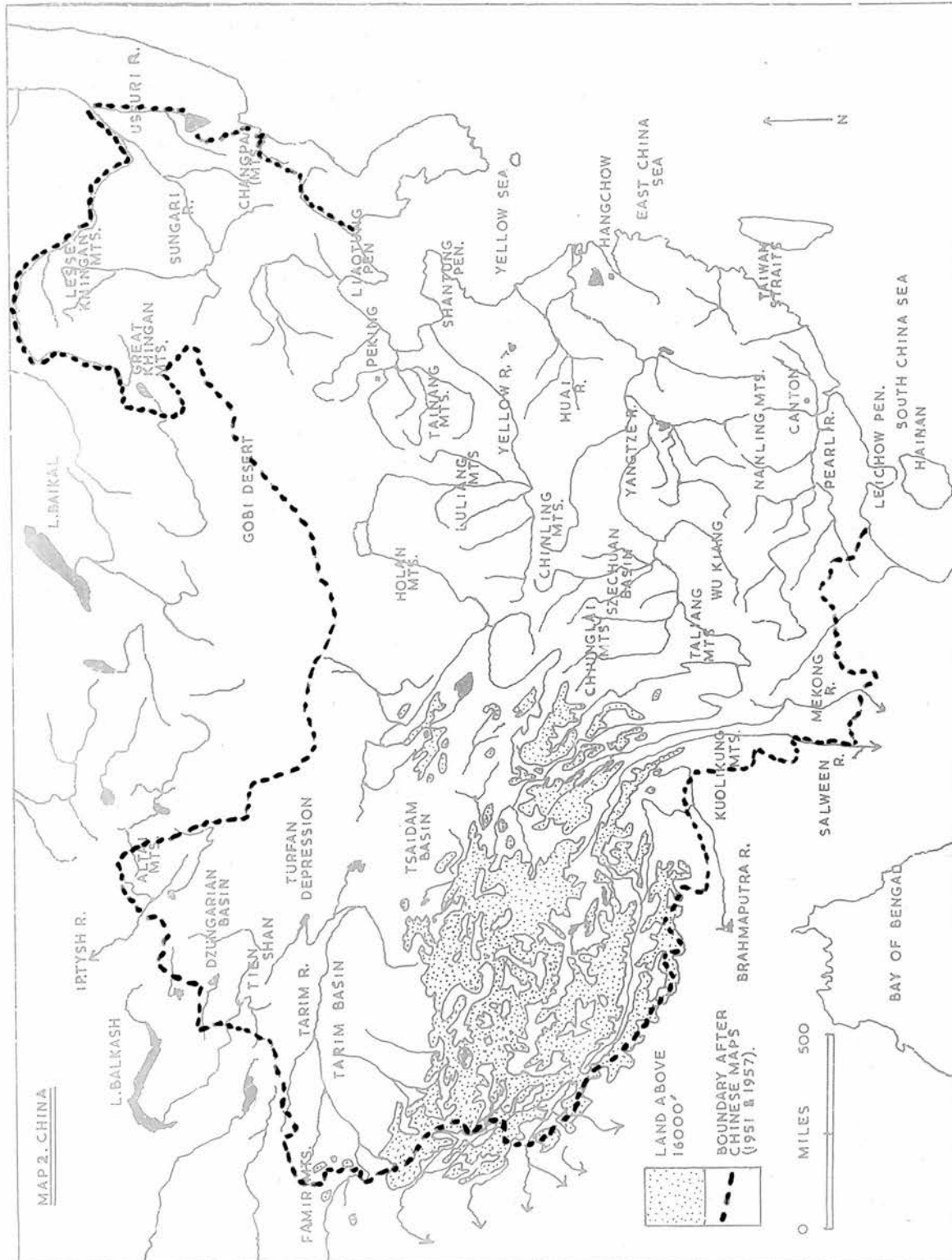
this size factor magnifies the difficulties met by a determined administration such as that at present in Peking in its efforts to bring effective government to the whole state area.

China's land boundaries are approximately 9,375 miles long (Map I). They divide Chinese territory from that of the Soviet Union, the Mongolian People's Republic, Korea, North Vietnam, Laos, Burma, Bhutan, Sikkim, Nepal, India, Pakistan, Afghanistan, and Hong Kong. The boundaries with North Vietnam, Laos, Nepal, Sikkim and Hong Kong have been both delimited and demarcated; those with Burma, Mongolia, Pakistan, Afghanistan, Korea, and the U.S.S.R. have been delimited, although recent Chinese statements suggest that the delimitation of the Sino-Soviet boundaries may be unsatisfactory to Peking, and the Sino-Mongolian boundary agreement has not been published so it is only assumed that it has been delimited. The Sino-Bhutanese and the Sino-Indian boundaries have not yet been satisfactorily delimited.

The boundary between Korea and China is mostly formed by the Yalu and Tumen Rivers.² That between the U.S.S.R., the Mongolian People's Republic and China stretches from Kirin to western Sinkiang; in the northeast China and the Soviet Union are divided by Hsingkai Lake, the Ussuri River and the Amur River. The Sino-Mongolian boundary (agreement concluded on December 26th 1962, but details of the treaty still not available) is mainly across steppe and desert, except in the west where the Altai Mountains dominate the landscape. In Sinkiang the boundary with the Soviet Union is across mountains and rivers, whilst the Pamirs straddle the Sino-Afghanistan border. The Himalayan mountain complex divides China from Pakistan, India, Nepal, Sikkim and Bhutan. The boundary between China's Yunnan Province and Burma is a wild area of rivers and mountains. Laos and North Vietnam share a boundary with

2. The geography of the boundary areas is dealt with more fully later in the thesis.

MAP 2. CHINA



China's Yunnan and Kwangsi Provinces. Finally, China's maritime border is broken for a short distance by the Hong Kong-Kwangtung boundary which is marked by a small river and its tributaries.

The eastern part of China (Map 2) is mainly composed of hills and plains with few areas over 2,000 feet. The southwest has a vast complex of land over 15,000 feet. The bulk of the rest of China in the northwest is between 3,000 and 5,000 feet above sea level, but includes some notable exceptions in Sinkiang such as the Turfan Depression (500 feet below sea level) and the Dzungarian Basin.

Of China's total area only a tenth of it is composed of plains, although this represents four times the size of the British Isles. The three main plains are in the Northeast, the North China Plain, and that of the middle and lower Yangtze. There are also smaller plains such as that of the Canton delta. These plains are amongst the most important agricultural areas in the world. Transport within the plain areas is as good as anywhere within China, and better developed than in most areas, but transport between the plains is far from satisfactory. As China's history shows the comparative isolation of southern China from the north has on occasion led to it splitting away from the north to form a separate state. Nationalist-held Taiwan limits the use that can be made of sea communications between the north of China and the south, but notably rail and air transport between the two is being developed in the eastern half of the country.

A fifth of China's total area is composed of basins. In eastern China is the agriculturally rich Szechuan Basin (Map 2), but the three other main basins are located in the interior of the country. The Tsaidam Basin is part of the

Chinghai-Tibet Plateau and lies between the Chilian Mountains and the Bayan Kara Mountains which are themselves branches of the Kunlun Mountain range. The Tarim Basin is between the Kunlun Mountains and the Tien Shan, whilst the Dzungarian Basin lies between the Tien Shan and the Altai Mountains. The three basins are isolated from the sea with a semi-arid climate and large areas of desert. Snow fed rivers from the surrounding mountains have been used for irrigating the basins. Again, transport within the basins is not particularly inhibited by the physical geography, but contact between Peking and such an area as the Tsaidam Basin (Map 2) is still far from satisfactory if the central government's administration is to be effectively imposed upon the region.³

The most important plateaus in China are the loess of the north, the inner Mongolian plateau, the Tunnan-Kweichow plateau and the Chinghai-Tibet plateau. The loess plateau lies between the Great Wall in the north and the Chinling Mountains (Map 2) in the south, and the Taihang Mountains in the east and the Tao Ho tributary of the Yellow River in the west. It includes all of Shansi Province, most of Shensi, southeastern Kansu and northwestern Hopei Province. The loess plateau has an average height of about 3,500 feet and is covered with a thick layer of loess which is often over 350 feet deep. The plateau surface has undulating loess ridge configurations and only in a few areas is this gently rolling landscape broken by rocky mountains.

To the north the loess diminishes and the soil becomes sandy until the Inner Mongolian Plateau north of the Great Wall is reached. The landscape here is one of grassland and desert. The Inner Mongolian Plateau is bordered in the east by the Khingan Mountains, in the west by the Chilian Mountains and includes the Inner Mongolian Autonomous Region, plus northern Kansu. The

3. Throughout this study an effective administration is assumed to be that which is at least approaching the central government's influence around Peking.

elevation of the Plateau is about the same as that of the loess to the south. The southern areas are agriculturally rich, using the water of the Yellow River and that from the northern slopes of the Chilian Mountains (snow fed) for irrigation. The rest of the Plateau is used for stock raising, although efforts are being made to extent the area of cultivation.

The Yunnan-Kweichow Plateau includes Kweichow Province, plus the eastern part of Yunnan Province. It is at a height of 3,500 to 7,000 feet over most of its area, the western being higher than the eastern part. It is a region of limestone with a resulting karst topography. Flat land is used for padi, whilst hill slopes are terraced. Much of Yunnan is only tenuously attached to the Chinese administration due to isolation of settlements resulting from the physical geography. To overcome some of this isolation the Chinese have been building railways in the area, using Kunming as a centre for the network. Peking's administration is becoming more effective in the area up to the boundary with Burma, but it cannot be claimed that it is as yet satisfactory; there are many problems which the physical geography presents to the functioning of the interests of the central government.

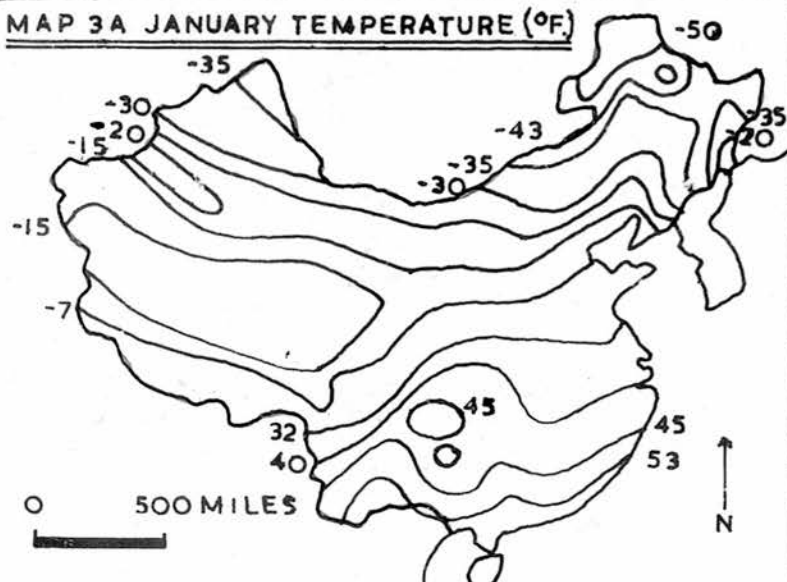
To the west of the Yunnan-Kweichow Plateau is the Chinghai-Tibet Plateau. This includes Chinghai Province, Tibet, western Szechuan and western Yunnan. This is the world's most extensive plateau and is mainly at about 15,000 feet (Map 2). Agriculture is practised in the lower areas of the river valleys. This is one of the areas of China in which geological exploration is revealing impressive mineral resources. More especially in the Tibetan part the first attempts at bringing Chinese government to the region in the early 1950's were challenged by a people grown independent in the physical isolation of their harsh environment. The Chinese Communists have had greater difficulty imposing any form of administration upon the Tibetan region than anywhere else in the

People's Republic. Mountains and distance from Peking made Tibet largely inaccessible to the Chinese for many centuries leading to the development of a different culture based on Lamaism. The Chinese effort since 1950 to firmly attach Tibet to the rest of the country has been greater than in any other area, probably because of the physical and cultural obstacles. Of overwhelming importance in the increasing success of the Chinese since 1960 has been the building of a network of all-weather roads breaking down effectively for the first time Tibet's physical isolation. Chinese administration is not fully effective within the Chinghai-Tibet Plateau, but it becomes more so each year.

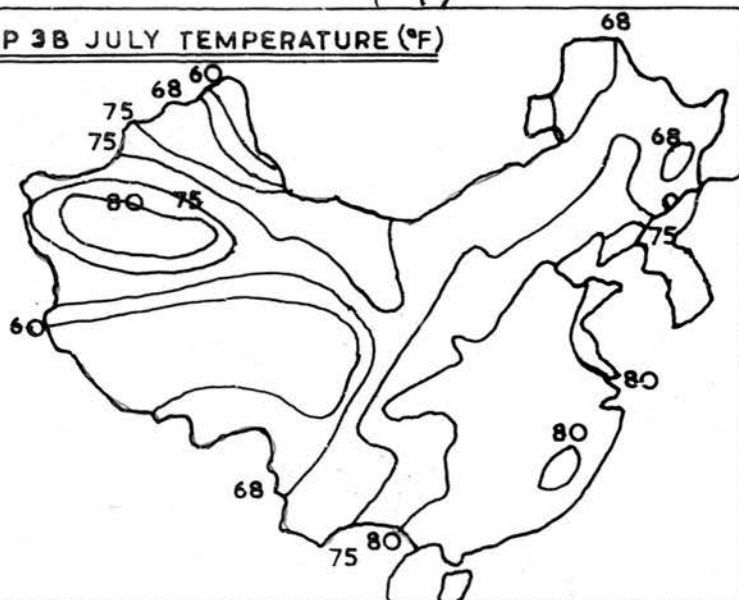
There are nine major mountain ranges within China, namely the Altai, Tien Shan, Kunlun, Himalayas, Khingan, Yin Shan, Chinling and Nanling (Map 2). Only the Hengtuan Mountains run from north to south, thereby to a certain extent hindering east to west communications. It is communications with the interior of the country which are at present the most pressing need to advance China's political unity, and the main mountain ranges in their east to west alignment do not provide as great a hindrance as might be expected.

China's coastline, which stretches from the Yalu River (Sino-Korean boundary) in the north to the Peilun River (Sino-Vietnamese boundary) in the south, can be divided into two sections. From Hangchow northwards it is mainly a sandy coast with few islands, shallow coastal waters, poor in natural harbours and backed by a plain; the exceptions are the rocky Peninsulas of Liaotung and Shantung and Chinwangtao. South of Hangchow the coastline is a rocky one with the exception of the Leichow Peninsula and the mouths of the rivers. This is the coast with the indentations which have proven suitable for ports. The land above the coast is hilly. Islands are off shore, and in fact most of China's islands (there are over 3,400 of them)

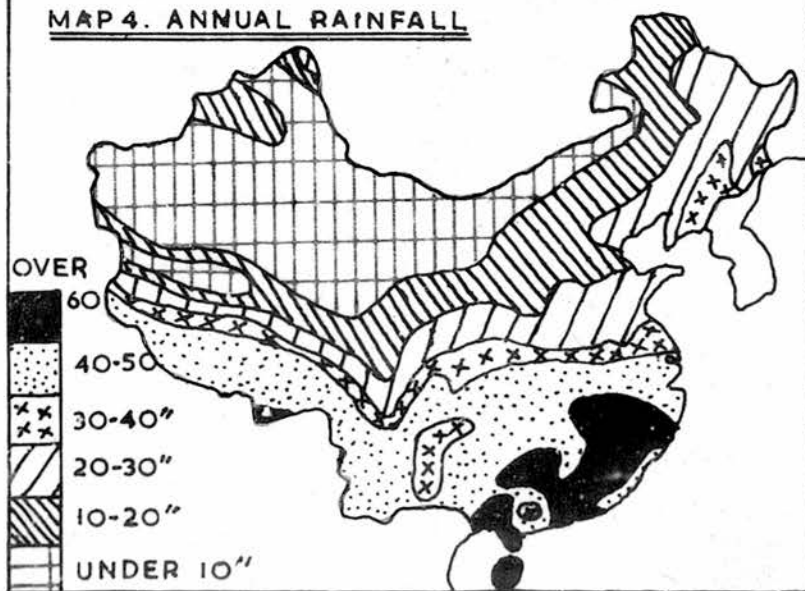
MAP 3A JANUARY TEMPERATURE (°F)



MAP 3B JULY TEMPERATURE (°F)



MAP 4. ANNUAL RAINFALL



lie off the coasts of the Provinces of Kwangtung, Fukien and Chekiang.

As Tibet demonstrates the building of a transport network between the various parts of China can often be made a difficult and expensive undertaking due to the inhibitions of the topography. Until such time as China has a more comprehensive transport system effective political administration will not be realised. The isolation of the border areas hinders Peking's authority up to the boundary, and this problem of distance from the capital is often complicated by difficult terrain.

The complex topography and size of China leads to a wide range of climate. Map 3a. gives a general indication of January temperatures, ranging from the mild climate of the southern part of the country to the extreme winter cold of the north and much of the interior. Snowfalls in Tibet and northern China often dislocate transport facilities and add further difficulties to the central administration. As can be seen on Map 3b, July average temperatures are less pronounced in regional differences. The most extreme July temperatures are found in the interior away from the moderating influence of the sea, and often due to relief characteristics, for example the Turfan Depression has a July average of over 90 degrees F.

With regard to rainfall the state can be divided into three regions which are the outcome of China relying upon the Pacific Ocean as a source of moisture so the further west one progresses the less the rainfall becomes. South of the Chinling Mountains and in the southern part of the Chinghai-Tibet Plateau there is a Humid Zone with the annual rainfall in excess of 40 inches.

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4. The maps, plus much of the climatological material, are from: Climatic Research Office of the Central Weather Bureau, Peking: 'Climatic Atlas of China', Geographic Press, Peking 1960. Much of the information for the interior of China is based on incomplete data.

In the southeast there is over 60 inches of rain per year. The precipitation is heavy in these areas as it is in the south that the summer monsoon prevails and the region is bounded by mountains in the north and west which intercept the wet winds (Map 4). The region north and northwest of the Yin Shan and Kunlun Mountains receives an annual rainfall which is less than 10 inches. In Sinkiang to the north of Tien Shan there is a heavier rainfall due to moisture being brought by winds from the Arctic Ocean. The land between the Humid Zone and the Arid Zone is an area of transition and is mainly semi-arid.

Not only is there an uneven distribution of annual rainfall throughout China, but there is also a tendency to differences between years. Peking illustrates well this point. Here the average annual precipitation over 69 years was about 25 inches, but the heaviest year had 43 inches and the driest 12 inches. The Northwestern areas and the lower Yellow River have the greatest fluctuations in rainfall and the Pearl River Basin the least.

Rainfall in China falls mainly in summer and autumn and 80% or more of the annual total falls between May and October. In summer a flow of hot air comes from the interior of Asia to create a region of semi-permanent low pressure in Siberia and Mongolia. From areas of high pressure over the Pacific Ocean arrive southeasterlies which are warm and moist and bring rain. In winter there is a reversal of conditions with cold and dry northwesterlies moving towards the low pressure area of the warmer Pacific. The winds start from Mongolia in September and die out in March. The regime of the winter and summer change of winds is further complicated by cyclonic storms. July to October is the typhoon season and the Provinces of Kwangtung and Fukien are estimated to receive 20-30% of their annual rainfall in this way,

whilst the coastal area north of the Yangtse River gets about 10% of its total from typhoons.

Marked regional differences in China regarding such considerations of physical geography as topography or climate work against Peking's efforts at effective political unity. The nomadic farmer of Sinkiang worrying endlessly about the limited rainfall is going to feel he has much more in common with the nomad of Soviet Central Asia or the Mongolian People's Republic than with a Han Chinese administrator sent from the lush southern area of Canton who has not had to contend with a water problem. Similarly, the man used to the extremes in climate of northeastern China will probably have more in common with the outlook of the farmer of the eastern U.S.S.R. than with the rice cultivator of the Pearl River area. Although there are many dangers in stressing the effects of physical geography it must be recognised in a state as physically diverse as China such considerations can emphasise that great force for disintegration within a country often known as 'provincialism'.

With regard to Han China (i.e. the historic eighteen provinces mentioned at the beginning of this section on China) many Sinologists favour a division of the state into the two cultural zones of the north and the south. Writing of this division Willetts⁵ stated 'Marked physical differences, especially in climate, have brought into being two separate Chinas with distinct racial, linguistic, and other traits.' This traditional division is a problem which the Communist administration has modified so that it is of less significance now than at any time in the past. Climate was an element in this division for that of the north encouraged the growing of wheat, millet, kaoliang and legumes, whilst the south was the zone of irrigated rice.

5. W.Willetts: 'Chinese Art'; George Braziller, New York 1958, p.16.

However, as with the nomads of the interior, political decisions are now over-riding the cultural significance of the differences in climate between north and south China. If these political decisions are supplemented by an adequate communications network ranging from roads to radios a greater conformity will result in the human geography, if not in the physical geography.

The fact that eastern China is of low elevation and has heavy rainfall results in most of China's major rivers being in the eastern half of the country. The rivers usually originate in the mountains and plateaus of the west, but flow east. With the summer maximum in rainfall and the melting of the snows China's rivers carry their greatest volume of water in this season.

Most of the rivers, such as the Amur, Yellow, Yangtse and Pearl Rivers, empty into the Pacific. Those flowing into the Indian Ocean are located in the south of the Chinghai-Tibet Plateau and western Yunnan Province, notable ones being the upper Brahmaputra (Yalutsangpo) and upper Salween (Nu Kiang) Rivers (Map 2). Only the Irtysh River in the northern part of Sinkiang empties into the Arctic Ocean. Interior drainage basins are found mainly in the north-western portion of China and account for a third of the area of the state.

Of the northern rivers the Yellow is the most important. It is the second longest in China, stretching for about 3,030 miles. Its source is at the northern foot of the Bayan Kara Mountains in Chinghai Province, and from here it flows through Kansu, Inner Mongolia, Shensi, Shansi, Honan and Shantung.

South of the Chinling Mountains the two great rivers are the Yangtse and Pearl Rivers. The Yangtse is the longest river in China (about 3,440 miles) and originates in the western part of Chinghai Province after which it flows south through the Chamdo Area, Szechuan, Yunnan and then takes an

easterly direction. After Yunnan the Yangtse re-enters Szechuan Province to flow through Hupeh, Kiangsi, Anhwei and Kiangsu to the Pacific. Steamships are able to use the Yangtse as far as Szechuan. More than a third of China's total population is found in the basin of the Yangtse.

The Pearl River rises in Yunnan and flows through Kweichow, Kwangsi and Kwantung to the South China Sea. It is navigable up to Kwangsi Chuang Autonomous Region. Both the Yangtse and Pearl Rivers are ice free in winter with only modest seasonal changes in level.

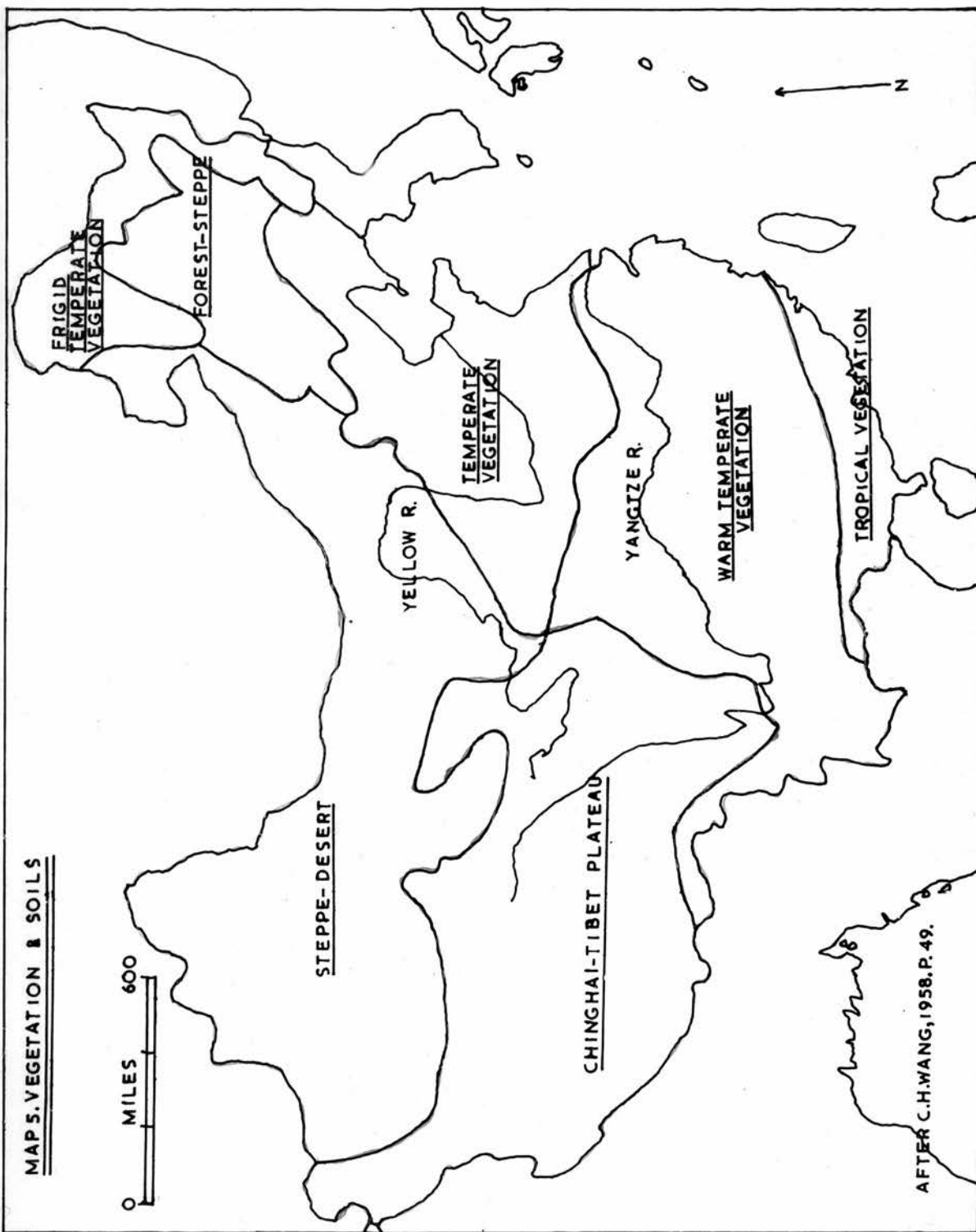
Due to the dearth of east to west flowing rivers as long ago as 500 B.C. a canal was built to join the Huai and Yangtse Rivers. During the Mongol Yuan Dynasty (1280-1368 A.D.) the Canal was lengthened to link Peking and Hangchow. The resulting Grand Canal is still the longest in the world (Approximately 1,114 miles), stretching across the Provinces of Hopei, Shantung, Kiangsu and Chekiang and linking the Yellow, Hai, Huai, Yangtse and Chientang River systems. The Shantung and northern Kiangsu sections are now badly blocked.

For a political geographer perhaps of greatest significance with regard to the rivers of China is that in the main they did not facilitate state unity by providing a better transport network, but hindered it by producing separate regions based upon the rivers. It is reasonably easy to trace out a region with its focus on the Pearl River, or one covering the Yellow River's flood plain. The rivers assisted transport within their areas, but did not encourage movement to other regions. Despite the ambitious achievement of the Grand Canal a greater unity might have been achieved within the important eastern half of China if a major river had flowed from north to south.

With regard to soils and vegetation distribution within China there is a distinct correlation between the two. Most Chinese scholars tend to

MAPS. VEGETATION & SOILS

0 MILES 600



AFTER C.H. WANG, 1958, P. 49.

favour a division of the country into seven main soils and vegetation regions, although the boundaries are not as precisely delimited as shown in Map 5.

South of the Nanling Mountains there is the zone of tropical vegetation with a deep red soil. This includes the southern areas of the Provinces of Kwangtung, Fukien, Kwangsi and Yunnan, plus the Nationalist Chinese stronghold of Taiwan. The landscape is green throughout the year, and the climate hot and wet. The typical vegetation is broad-leaved and includes mangrove forest along the coast and tropical rain forest further inland. To the north of this there is a region of warm temperate vegetation. The soils are red or yellow in the southern part, but become light brown north of the Yangtse. Very little of the natural vegetation is left, the forest having been replaced by agriculture, bamboo and mulberry. This is the farming heartland of China.

Temperate vegetation extends over the southeastern part of the loess plateau, the North China Plain and the southern areas of the Northeast of China. The soil is frozen in winter, but a more moderate rainfall means there is less leaching than those areas south of the Yangtse River. The natural vegetation is temperate deciduous with a sprinkling of conifers. Human activities over a long historical period and a variety of natural conditions have meant the development of a range of soils. The soil contains more calcium than that to the south and tends to be generally more fertile. The soil in Shantung and Liaoning Provinces is mainly brown forest. In the North China Plain and the southeastern part of the loess plateau the soil is a dark brown one, fine in texture and rich in lime it has become one of the principal farming areas of China. Only in the mountain

areas of this region has forest survived for Man has been active in cultivating the area since earliest times. The soils of the mountain areas tend to be alkaline in character.

The Forest-Steppe area of vegetation includes central and northern parts of the Northeast Plain, the forest zone of the Lesser Khingan and Changpai Mountains and an area of steppe in the west. The vegetation, therefore, ranges from forest to steppe, but there is greater conformity in the soil type which is mainly a very fertile black earth rich in humus.

North of the black earth zone is what Wang terms the 'Region of frigid-⁵ temperate vegetation'. This includes much of the Greater and Lesser Khingan and Changpai Mountains. The higher latitudes have a grey podsollic soil, whilst around the Changhai Mountains there is an infertile brown forest soil. The natural vegetation is coniferous forest, but the destruction of the trees has meant much of the region is now covered by grasses.

Northwest of the area of forest-steppe vegetation (black earth) a decrease in rainfall means a decline in vegetation cover. This is the zone of steppelands and desert. Eastern and southeastern Inner Mongolia is fortunate in having a greater precipitation than that to the west of the Holan Mountains (Map 2) and so is covered with steppe whilst the more westerly area is semi-desert and desert. The aridity of the climate means soils poor in humus, but rich in lime. The predominant characteristic is chestnut and grey soils. The vegetation consists of short grasses changing to thorny scrub further west.

The Chinghai-Tibet Plateau is a law unto itself with regard to soils and vegetation, due to the high elevation, cold and strong winds. Trees can only

5. Wang (Chun-Heng): 'A Simple Geography of China', Foreign Languages Press, Peking 1958 p.51.

rarely survive and so the most common vegetation cover is grass and shrubs. Above 13,000 feet can be termed a desert. The Hengtuan Mountains in the southeastern part of the Plateau demonstrate well the soil and vegetation zones of the region. Where there are valleys the bottoms, with higher temperatures and greater rainfall, support trees; the predominant soil here is brown forest. Above the valley floors there is grassland utilising mountain meadow soil. Finally there is little or no vegetation and the scant alpine desert soil.

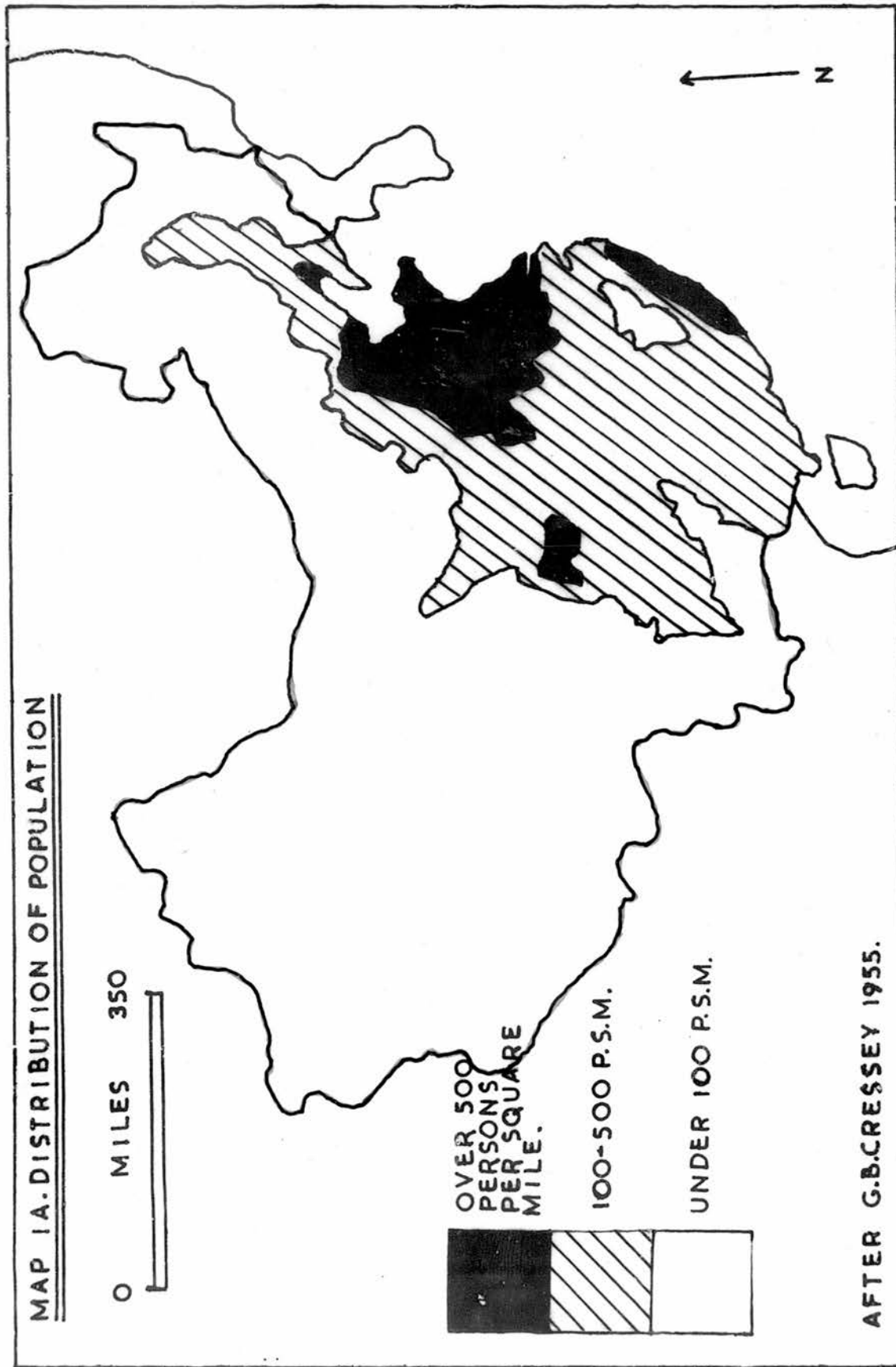
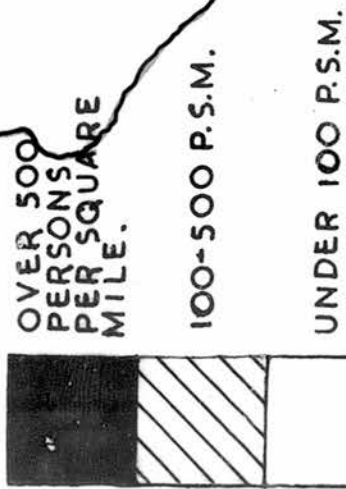
With an increasingly effective technology it is becoming unfashionable amongst Western geographers to suggest that physical environment can greatly affect human attitudes. The day of the determinist has rightly passed. Nevertheless, it is not possible to discuss such matters as the effectiveness of a political administration within a state area without talking of the traditions which produce disintegrative regions and which often have a relation with the physical environment which first encouraged them. The steppe-desert area of soils and vegetation in China has physical characteristics which inhibited the introduction of the Han form of irrigated agriculture, but which 'permitted' nomadic herding. There were other possibilities in the steppe-desert region, but with the technological equipment available when the development of the area began this was not apparent. Because of the technological limitations of the early people the adaption to the environment which developed was nomadic herding. The environment would not 'permit' the use of the other alternative which was the Han Chinese irrigated farming. A tradition of nomadic herding was established leading to the development of a distinct culture easily recognisable from that of the Han Chinese farmers of, for example, the Temperate Vegetation region (Map 5). The physical environment is of far less significance today, but the

traditions partly engendered by it are still well established. The 'provincialism' of the steppe-desert nomads is partly due to the physical environment; and this 'provincialism' challenges the authority of the central government.

China is a large and physically diverse state and for the various reasons stated within this study of the physical geography of the country this has been the major cause of the development of a number of regions. Tibet fought against integration into the People's Republic of China because of its different traditions which were largely the outcome of physical isolation. Tibet is a long way from Peking, is within an area difficult to traverse, has a climate very different from much of Han China, and other physical characteristics such as soils have led to a different economy. To bring effective Chinese rule to Tibet Peking has first to break down the region's physical isolation, notably by the development of communications with the rest of the People's Republic. However, at this point it should be stated that the challenge of regionalism to the development of state unity can always be overcome by a determined political power backed by an adequate technology. This point is well illustrated by Tibet where the building of an ambitious transport network has been supplemented by an influx of Han Chinese immigrant farmers. Being unable to fully convert the Tibetans to their ideas the Chinese administration has decided to displace them.

MAP 1A. DISTRIBUTION OF POPULATION

0 MILES 350



AFTER G.B. CRESSEY 1955.

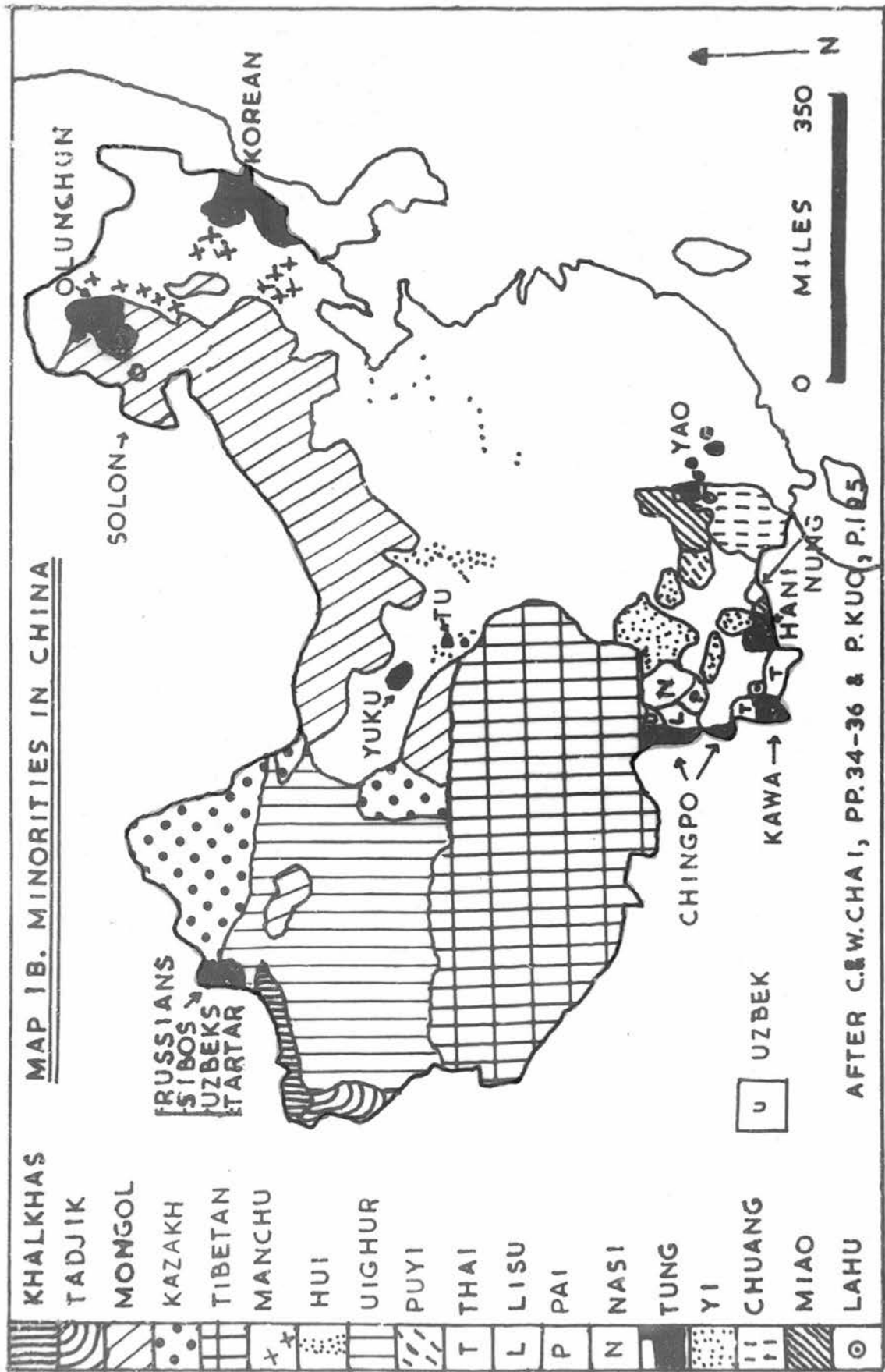
The People

Political decisions taken by the central government in any state are at least partly moulded in their characteristics by the population of the country; even the most independently minded despot cannot remain in power without taking into some consideration the traits and associated attitudes of his subjects. Similarly, political decisions affect the population of the state. Political decision and state population are interacting forces.

Therefore when dealing with such things as the effectiveness of the central government's administration within the state area and whether the state's boundaries are divisions within the landscape of singular importance is both the characteristics of the state's population and the various attitudes represented within it. In the following paragraphs China's population is dealt with, both as a whole and as a number of 'nationalities.'

In 1644 A.D. the population of China was estimated to be about 100¹ million, by 1741 approximately 140 million and it had passed the 400 million mark by 1850. According to the Census of 1953 China had a fifth of the world's population with a total of 601,938,035. If it is assumed that the natural increase in China's population is about 12 million per year (probably an underestimate) by 1965 the population may have exceeded 745 million. The population is concentrated in the eastern provinces (Map Ia) where Chinese civilisation has developed and flowered. Ten of the cities here have a population of over a million, whilst in the western two-thirds of the state the largest city is Lanchow with 600,000 inhabitants.

1. These historical figures are from Kuo (P.): 'China, New Age & New Outlook'; Penguin, Harmondsworth 1960, pp.21-22.



AFTER C.W. CHAI, PP. 34-36 & P. KUO, P. 185

The 1953 Census brought home to the world that, despite the vast preponderance of Han Chinese in China's population, it was a state of many nationalities. Minority groups accounted for 35,300,000 of China's total population or about 6% on the mainland. Amongst the most important groups were the Chuangs (6,611,455), the Uighurs (3,640,125), Huis (3,559,350), Yis (3,254,269), Tibetans (2,775,622), Miaos (2,511,339), Manchus (2,418,931), Mongolians (1,462,295), Puyis (1,247,883) and Koreans (1,120,405). The Chuangs are located in the Kwangsi Chuang Autonomous Region (Map 1b), the Uighurs in Sinkiang, the Huis in Kansu and Chinghai Provinces, the Yis, Miaos and Puyis in Kweichow, Yunnan and western Sechwan, the Tibetans in Tibet, Chinghai and western Sechwan, the Manchus and Koreans in the Northeast and the Mongols in Inner Mongolia. The Miaos, Yis and Puyis retreated before the oncoming Han Chinese into the more difficult highland areas.

In Article 3 of the Constitution of the People's Republic of China (1954) it was recognised that China was a multinational state. The minorities were given legal equality with the Han Chinese with freedom to use their separate languages and customs. Regional autonomy was given to the larger national groups (e.g. Sinkiang-Uighur Autonomous Region). But this was merely an action recognising a situation already in existence, namely that there were alien cultures within the Han domain. Assimilation is the aim of the central government in China, with determined efforts being made to defeat the isolation which encourages the retention of non-Han cultures. Efforts at more than nominal independence by the minority groups lead to harsh repression such as that experienced within Tibet.

In physical type there is usually only minor differences between the Han Chinese and the other groups and the Han Chinese have never been particularly worried by racial contrasts. From the earliest period of Chinese

history the Han have made a sharp distinction between themselves (Hua Hsia) and the barbarians (Yi Ti), but the emphasis was cultural and not physical. 'When the Chinese adopted the ways of the barbarian they were considered as barbarian; and when the barbarians absorbed the Chinese culture, they were considered as Chinese'.² This is well demonstrated by the situation during the Chou Dynasty (1100 to 249 B.C.) when those who lived in Central China around the confluence of the Yellow River and farmed were Chinese, but those to the north who did little agriculture were termed barbarians despite belonging to the same physical stock.' The Chinese, the Mongols, the Manchus, and the Tibetans, as we see them today, are not distinguishable except by some peculiarity of costume'.³

As Map 1b shows the bulk of the minority population is situated along the boundaries of China and the significance of this with regard to the effectiveness of the boundary line will be dealt with in later chapters. It is useful here to take a brief look at the main minority groups within the People's Republic. The Chuangs, along with their neighbours the Yao (Map 1b), the Tungs and the Miao, are located in areas of refuge unattractive to the advancing Han. Recognising the Chuangs (related to the Thais) to be China's second largest nationality in March of 1958 the former Province of Kwangsi was renamed the Kwangsi Chuang Autonomous Region.⁴ A Miao-Tuchia autonomous Chou has been set up in the

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2. C.Chai & W.Chai: 'The Changing Society of China'; Mentor, New York, 1962, p.34. Also important in this section have been H.G.Creel: 'Chinese Thought from Confucius to Mao Tse-tung'; Mentor, New York 1960; C.P.Fitzgerald: 'China, a Short Cultural History'; Praeger, New York 1953; R.Grousset: 'Chinese Art & Culture'; Orion Press, New York 1959; & C.Hu: 'China, Its People, Its Society, Its Culture'; Mayflower Press, London 1960.
 3. Chai & Chai: 'The Changing Society of China'; p.35.
 4. There is perhaps a need to clarify the official terminology of the Chinese administration with regard to terms such as 'Autonomous Region', 'Chou' etc. A large minority area is established as an 'Autonomous Region' and has a status similar to a province. It is administered by the central government. A small minority area is an 'Autonomous Hsien' and is governed like a county. The minority area of intermediate size is an 'Autonomous Chou' within a province.

Miao areas giving a certain amount of self government. As with most of the tribes of China's southern borderlands the Chuangs and Miaos were largely primitive agriculturalists in the higher areas practising a form of shifting cultivation with an economy based on rice, wheat, soya beans, maize and sweet potatoes. The continual problem amongst these tribes was one of adequate food and the need to trade for salt. Although a little local autonomy is given to the minorities (e.g. Chous for the Thai, Lisu, Chingpo, Puyis and Pai in the south) as previously stated China is trying to assimilate the tribes by bringing them within the economic, cultural and communications network of the Han Chinese. Population densities in the tribal areas of the southern borderlands rarely exceed about 50 persons per square mile and in the Tibetan and Yis areas may be much less.

The staple food of the Tibetans is highland barley which is drought and cold resistant. Throughout the year the Tibetans wear fur lined clothing, although in the warmer months they drop the coat to the waist. The economy of the Tibetan areas is mainly based on animal husbandry, although since the advent of Communist power in 1951 there has been a move to increase the land under cultivation with an introduction of Han Chinese settlers. Population densities are often as low as 1 person per square mile. Barley is now being challenged by rice and wheat as a dominant crop. The Tibetans differ from the minorities of China's south in that they are the possessors of an impressive culture of their own based on a modification of Buddhism, and usually known as Lamaism. It was partly because of the importance of the Lamaist monasteries that compact communities are favoured by the Tibetan peoples. The Tibetans also have a proud history, having at one period controlled an empire which stretched across what is now western China and Nepal into India. Resistance to Chinese attempts to crush Lamaism and transform the Tibetans

has been violent in contrast to the reaction of tribes of weaker culture such as the Miaos. In 1959 the Dalai Lama, who may be considered the spiritual leader of the Tibetans, escaped to India because of the Chinese efforts at assimilating the Tibetans. As in Inner Mongolia the distinctiveness of the Tibetans culturally cannot be expected to survive an influx of Han Chinese settlers and a determined administration.

Sinkiang has at present 13 nationalities within its boundaries, there being Uighurs, Kazakhs, Han Chinese, Huis, Khalkhas, Mongols, Russians, Uzbeks, Tadjiks, Tartars, Daur, Sibos and Manchus. 74% of the population is Uighur in an area which accounts for a sixth of China's total. The tribes of Sinkiang specialised in animal husbandry with herds of sheep, cattle, horses and camels. Although animal husbandry still predominates the Communists have endeavoured to replace this economy with irrigation projects to settle the population which was largely nomadic. Between 1949 and 1958 Sinkiang's cultivated areas rose from 1,060,000 hectares to 1,730,000 hectares with wheat, maize, rice and cotton being of particular importance.

Traditionally the culture of the Turkic Uighurs and Kazakhs was a similar one, being often based upon nomadic herding. As the independence of this form of life has always proven alien to Han Chinese concepts of civilisation since the Nineteenth Century efforts have been made to change it. The most popular method of undermining the nomadic way of life is to introduce farmers where possible; also proving effective is the reorganising of animal husbandry itself so that it is no longer nomadic, but is similar to ranching with the tent giving way to the house.

Both the Koreans and Huis have been granted the right to Chous. The Koreans have an impressive culture which has always owed much to the influence of China, and with the now close relationship between North Korea and China there is an increasing similarity which makes the Korean minority

within China less distinctive than it was before 1949. The Huis were more backward than the Koreans, but are being largely assimilated by the Han Chinese. Both the Koreans and the Huis are farmers, although some of the Huis are also stock raisers.

In the Northeast forestlands are the Olunchun hunters, a quickly dying culture due to the development of their hunting grounds for forestry, animal husbandry and cultivation. The Manchus were originally hunting tribes, but are now associated more with stock raising.

What of the Han Chinese culture itself that it should prove so much stronger than that of the minority groups? It is a secular tradition and, except for some Chinese (Dungans) in the west who were converted to the Moslem faith and who periodically rebel against the administration, religious wars are unknown in the history of China. 'Thanks to her secularism, the history of China is marked by tolerance and an open-mindedness of spirit. It is a history of assimilation, not segregation.'⁵ The secular outlook of China helps to explain why Communism should succeed within the state. Also important in the strength of China's culture is its distinctiveness. For example the language is so different as to encourage isolationism. It is based on ideographs, is monosyllabic and has no alphabet. One sound has to represent many words and different tones used to provide an adequate vocabulary. Grammatical relations are shown by word order and context, not conjugations or inflections. Each ideograph represents an idea or an object. To read a fairly basic book knowledge of at least 3,000 ideographs is needed. As might be expected after so many centuries of use the ideographs are peculiarly suited to a certain way of thinking. With such a language it is hardly surprising that it should be such a cohesive force.

5. Kuo (P): 'China'; Oxford University Press, London 1963, p.23.

Although within the Han Chinese world there are many dialects there is only one written language.

The Chinese culture, unlike those of Europe, has grown up in isolation which has produced a way of life which in itself is largely complete. The Han always considered themselves the centre of a superior culture which radiated its beneficent influence outwards to the alien world. Until the advent of Europe's superior organisational and technological abilities in the Nineteenth Century it would not have crossed the Chinese mind that anyone else had anything to offer. Therefore China's attitude was, and tends still to be, that she had much to give to the minority groups and they had nothing acceptable to her in way of cultural exchange. China resembled a missionary going to a foreign place which did not accept her ideology or did not perhaps know of it.

Basically China of the Han is culturally coherent, but, as previously mentioned, there is a division between the north and the south. This was well demonstrated in the years following the death of the reactionary President of the Republic of China Yuan Shi-kai; the followers of the dead President after losing their leader in 1915 held the north of China whilst the revolutionary Sun Yat-sen found his support in the South and was based on Nanking and Canton. Chinese civilisation had started in the northern areas along the alluvial tracts of the Yellow River and its tributaries from where it spread eastwards into the coastal plain and southwards, 'taking over other early neolithic settlements and absorbing the aboriginal tribes.'⁶ Differences between the Mongol characteristics of the northern Chinese and of the southern Chinese are of little significance, the northern being taller, lighter skinned and having in many

6. C.Chai & W.Chai: 'The Changing Society of China', Mentor, New York 1962, p.30.

cases thinner lips and a less broad nose. The division has been a cultural one based on economic factors, in a country of farmers what could be of more importance than the north having an economy based on wheat and the south one favouring rice? However, since 1949 the differences between north and south China have been decreasing under determined Communist efforts to integrate the whole state area.

At present China has far to go before she can claim to be a unit with regard to population characteristics. The Chinese administration is determined to negate as far as possible these forces for disintegration within the state, the official policy being stated firmly in the 1954 Constitution 'National autonomous areas are inalienable parts of the People's Republic of China'. As yet China is in the process of modifying many of the characteristics of the state's human geography by her endeavours to impose political unity on the minority groups. 'Peking pursues a policy to integrate the non-Han minorities ... with the centre of power in China proper. Although this has been disguised by establishing 'Autonomous Regions', giving the local population control of their own culture in return for accepting political and economic control by Peking, the change is truly revolutionary in character. Inner Mongolia was the first to come under tight control. Sinkiang followed next. Tibet was the last to be integrated. Here the building of strategic highways and other preparatory work took time, while the resistance led by the Dalai Lama held out until 1959, when the Tibetans' last proud stand was crushed by the superior forces of the Communists.⁷ If the distinctive economic character of a national group, for example the nomadism of the Mongols, is changed then also the culture is modified. 'Cultural autonomy' will eventually mean a way of life which resembles exactly that of the Han Chinese except for the wearing of distinctive dress on festive occasions.

7. P.Chou: 'China'; Oxford University Press, London 1963, p.110.

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Economic Characteristics

Political and economic matters in any state are inter-related. When dealing with a question such as whether Peking's administration is effective throughout China inevitably economic factors come to mind such as the characteristics of the transport network which makes government easier to a greater or lesser extent, or the distribution of industries which back the administration's policy, or the dominant employment for the population (i.e. usually an agricultural economy produces a conservative peasantry, whilst an industrial economy a more radical population). In the following paragraphs the discussion concerns the economy of China and its functioning under Mao's administration. Although this part of the thesis is mainly descriptive some attempt will be made to interpret the material dealt with in the light of the two questions posed in the first chapter; in particular it is interesting to see whether those economic decisions taken by the Peking administration are modifying the geography of China, more especially in the border areas such as Sinkiang and Tibet.

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1. The following texts have been of particular importance in the writing of this section: J.L.Buck: 'Land Utilisation in China'; University of Chicago Press 1937; Central Intelligence Agency: 'The Economy of China 1958-62'; Washington 1960; O.E.Clubb: 'Twentieth Century China'; Columbia University Press, New York 1964; M.ErSelcuk: 'The Iron & Steel Industry of China'; Economic Geography, 1956; V.C.Hoang: 'Collectivisation & Rice Production'; China Quarterly No.9, 1962. Most of the statistical material is from the publications of the U.S. Consulate General in Hong Kong or G.W.Hemy: 'Production Statistics of Communist China'; Joseph Crosfield, London 1956.

Agriculture is still the mainstay of the Chinese economy despite advances in industrialisation. It is related closely with the physical geography in its characteristics, and notably with climate; for example in the more arid areas the concentration of alkali in the soil may preclude cultivation altogether or in the semitropical south the high rainfall causes serious leaching and produces soils of low fertility. However, 'in many parts of China human intervention has modified soil conditions more than in any other considerable zone of the earth's surface.'² About a quarter of China's total area is cultivated giving 0.4 acres per head of population compared to 2 acres in the United States. A European puts in 2 days of labour for one acre of wheat whilst a Chinese lavishes 30 days.

Chinese agriculture has to be intensive. It is characterised by the growing of crops for human consumption and the keeping of pigs and poultry to use the waste which is edible and provide manure. Sheep and cattle are only important in the drier areas of the northwest. Important centres of agriculture include the North China Plain, the Yangtze lowlands and delta, the coastal basins of Chekiang and Fukien, the Canton Delta, the Red Basin of Szechwan and the Wei Ho valley. Irrigation techniques are used for the farming of the drier areas of the north and for flooding the padi of the south. The great agricultural division between the rice area of southern China and the wheat-millet economy of northern China is just north of the Yangtze stretching from Szechwan to southern Kiangsu Province. Wheat dominates north China and is autumn sown except in the extreme north

2. W.G.East & O.K.H.Spate (editors): 'The Changing Map of Asia'; Methuen, London, 1958, p.272.

where spring wheat is grown. Millets are important in those areas where drought inhibits wheat. There is an overlap of rice and wheat (winter crop) in the areas north of the Yangtse where such provinces as Szechuan, Hupeh, southern Anhwei and southern Kiangsu have over a 9 month growing season. Sweet potatoes, which were introduced from the Philippines during the Sixteenth Century, are important in the sandy soils of the southeast. The soya bean and peanuts are significant crops in the northern plains. Barley is grown in the Yangtse's central area, whilst maize has found popularity in the northeast and southwest.

The pressure of population on the land has meant that food crops have tended to prove too vital to rural stability to permit the development of commercial crops. Similarly, despite the energetic efforts of the Communists since 1949, the rural areas remain conservative in their farming techniques even if they are more adventurous in their organisational set-up. The silk of Kiangsu and Chekiang is still mainly reeled by hand. Tea is of importance internally and is produced in Kiangsi and Hunan, but the peasant production for export has been replaced by the more efficient plantation tea of Ceylon and India. In cotton China is largely self-sufficient and it is her most important commercial crop, being grown along the central and lower Yangtse, Kiangsu, north Chekiang, west Shantung, Hopeh, Shansi, Shensi and Hupeh. The cotton is mainly of a short staple type.

The successes achieved in industry under the Communists have not been reflected in agriculture. There are the environmental troubles of flood and drought such as those which plagued China between 1959-61.³ The con-

3. D.J.Dwyer: 'China's Natural Calamities & their Consequences'; Geography Vol.47, No.3, 1962.

servatism of the Chinese peasant with regard to new techniques, population pressure upon the land and its attendant underemployment, poor transportation, and the use of forest and grass for fuel are all problems. The cultivation of steep slopes without terracing or contour ploughing leads to soil erosion in the hill regions of south and central China and the loess of the northwest. Despite the redistribution of land the average farm is still under 4 acres. Finally, as long ago as 1933 J.L.Buck was stating that yields could be increased in most areas by 25% or more.

The stagnation of Chinese agriculture reveals itself in the official and estimated figures.⁴ In 1955 the total area under grain crops was 118.4 million hectares producing 174.8 million metric tons, in 1963 the area was 118.5 million hectares giving 179.1 million metric tons. Rice production in 1955 was 78 million metric tons whilst in 1963 it was 78.4 million metric tons; this is hardly a figure to be enthusiastic about considering that the population in the same period will have increased by at least 96 million people assuming 12 million new mouths to feed each year. Wheat production in 1955 was 23 million metric tons whilst in 1963 it is estimated to have been 21.8 million metric tons. Potatoes (included by the Chinese as a grain) show the most encouraging picture with a 1955 production of 18.9 million metric tons which increased in 1963 to 24.3 million metric tons. Other grains (including peas) gave 55 million metric tons in 1955 which decreased a little to 54.6 million metric tons in 1963. With regard to the harvests for 1963 it was a good year, but for the period July 1st 1963 to June 30th 1964 China had to import a little under 6 million metric tons of grainstuffs, most of it being wheat.

4. From the United States Consulate General's Office in Hong Kong: 'Current Scene' 1964, p.27.

With such a sad picture in agriculture the 1958 'Great Leap Forward' programme in industry has largely been abandoned and since 1960 farming has been given priority. Similarly there has been a renewal of the 1956 birth control propaganda and a campaign against early marriages. In 1962 the much publicised Commune system broke down; in 1958 between April and October over 90% of the farming population (which constitutes about 75% of the total population) had their co-operatives amalgamated into Communes. Thus 750,000 producers co-operatives became 26,000 Communes. By 1960 the failure of the Communes was already beginning to show when 5% of Commune land was made over for private use, 'this has been reflected in the fact that the most marked improvements in output during the last two years appear to have been in vegetables, pigs and poultry.'⁵

As early as December of 1955 Mao's Government was worried by the poor yields in agriculture and shortly afterwards a Twelve Year Agricultural Development Plan was published (1956-67). The increase in yield per acre for grain is still one of the prime objectives of the Administration. The yield per acre in north China is to be raised from 1,000 lbs. to 2,700 lbs., that in central China from 1,400 lbs. to 3,250 lbs., and that of south China from 2,700 lbs. to 5,400 lbs. In the agricultural programme emphasis is being placed upon irrigation, flood control, better seed, more fertiliser, closer planting, better administration, where possible tree protection, more modern implements and the use of insecticides.

Although the Communist revolution in China was a popular uprising the average Chinese peasant is as conservative in outlook as any man to be found in the rest of the world. An experiment such as that of the Communes was

5. D.J.Dwyer: 'China's Recent Harvests': Geographical Journal Vol.130. June 1964, p.321.

doomed to failure before it was launched. Although the government in Peking has nominal control of the areas of intensive agriculture in China (notably the eastern half of the country) the effectiveness of the administration is severely limited. For example it has been demonstrated that excellent yields may be gained from rice grown as far north as Manchuria, but government attempts to convert the wheat areas of northern China to rice cropping have been singularly unsuccessful. In much the same way although this is the most effective government China has ever had the political influence of Peking cannot extend the area of wheat cultivation in the south. Agricultural distributions within China are not being greatly changed by Mao's rule in Peking except in one or two pioneer areas where a sparse population has not hindered new developments (e.g. Tibet) to an unmanageable extent. The Chinese peasant is willing to try to increase his production, but not to change his traditional crops or methods. With regard to the boundary areas of China in most cases this agricultural traditionalism is not involved as these are usually regions of modest population and development (e.g. Sinkiang, Tibet, Inner Mongolia and Manchuria). However, in an area of long established Chinese agriculture as in the border zone of the Sino-Hong Kong boundary the advent of Communism in China has not changed greatly the characteristics of agriculture on the Chinese side of the international line.

The exploration for minerals within China is a relatively new occupation and is not so hindered by tradition as is farming. Prospecting under the First Five Year Plan (1953-57) revealed many new mineral deposits and led to China claiming coal reserves of 1,000,000 million tons as against the previously held figure of 260,000 million tons. By 1963 the figure for coal

INDIVIDUAL OUTPUTS UNKNOWN

L=LEAD & ZINC

W=WOLFRAM

P=COPPER

F = IRON

C=COAL

二十一



AFTER C.H.WANG, P.21.

reserves had risen to 1,200,000 million tons, for iron ore 11,000 million tons, oil reserves were estimated at 100 million tons (this may have increased considerably after oil discoveries in 1964 at Chinchow 300 miles east of Peking), and there were considerable deposits of manganese, tungsten, tin, antimony, magnesite and bauxite, plus moderate ones of copper, lead, zinc, silver and gold.

China is one of the great coal producers of the world, reputed to have exceeded 400 million tons in 1960 (in 1936 production was 35 million tons, in 1949 32.4 million tons, and in 1957 130 million tons).⁶ The distribution of coal deposits in China is extensive as Map 1 demonstrates, but the most important mining areas are in the Provinces of Liaoning (Kailan and Fushun centres), Hopei (Fuhsin) and Shansi (Tatung).

Iron ore is also widely distributed in China, but the important centres are at Anshan in Liaoning Province, Tayeh in Hupeh, Bayin Obo in Inner Mongolia, and Panchihhua in Szechuan. Where there is coking coal and iron ore in close proximity it has been possible to develop a steel industry such as the industrial complex of Liaoning Province, Wuhan in Hupeh, Paotow in Inner Mongolia, Peking and Tientsin in Hopei Province, and at Chungking in Szechuan. Coal and iron mining are hindered in China by the limitations of the transport system. Despite efforts to keep down the need for transporting such raw materials in 1960 over 40% of the total rail freight was made up of coal.

China's crude oil is located mainly in Sinkiang, the Tsaidam Basin of Chinghai, Kansu, and Szechuan, whilst oil shales are found in Kirin and south

6. These figures are from D.J.Dwyer: 'The Coal Industry in Mainland China Since 1949'; Geographical Journal Vol.129, Pt.3, September 1963, p.337.

Kwangtung (Map 1). The largest oil workings are at Yumen in Kansu, Fushun in Liaoning and Wusu in Sinkiang. In 1957 production of crude oil was about 3,760,000 metric tons, which increased to a little over 4 million metric tons in 1960.

About 4% of the world's tin production comes from Nochin in Yunnan Province each year, but tin is also mined north of Wuchow in Kwangsi and at Tayu in Kiangsi Province. China also produces 60% of the world's antimony, notably from Hsinhua in Hunan, Shachuan in Kwangtung and in southeastern Kweichow Province. Kiangsi, Hunan and Kwangtung between them produce 45% of the world's output of tungsten per year, and China is self sufficient in bauxite from Shantung and Heilungkiang Provinces. From Shihmienchung in Szechuan Province is produced asbestos. Lead and zinc deposits are located at Kashga in Sinkiang, Changning in southern Hunan, South of Anshan in Liaoning, and exploration continues hopefully in other areas as China is not well endowed in these minerals. Wolfram is found at Kanchow in Kiangsi and north of Ining in Sinkiang. China produces enough gold for her industrial needs from mines near Khotan, Tachang and Kashga in Sinkiang, Yushu and Sining in Chinghai, Chengtu and in northern Szechwan, southern Shensi, central Hunan and in the Shantung Peninsula. Salt is fairly widespread throughout China. Manganese comes from southern Kwangtung, near Hsinhua in Hunan, north-east Kiangsi, east of Wuchow in Kwangsi, north of Lanchow in Kansu and Anshan in Liaoning. China has a reasonably good mineral base for the development of an industrial society.

At the end of the Eighteenth Century Lord Macartney returned from China with a message from the Emperor Ch'ien Lung to George III which stated that 'our Celestial Empire possesses all things in prolific abundance and lacks no products within its own borders. There is, therefore, no need to

import the manufactures of outside barbarians in exchange for our products.' Trade was later imposed by the European 'barbarians' upon the Chinese who were brought face to face with the superiority of the former's technology. From about 1928 onwards serious attempts were made by the Chinese Kuomintang administration to speed industrialisation within China, but the twelve years of warfare from 1937 to 1949 inhibited progress. In 1937 China was producing cotton, silk and woollen manufactures, glass, chemicals, cement and such traditional items as porcelain. The cotton industry was the biggest and most modern development, with 5 million spindles. Manufacturing was located at Nanking, Shanghai and Hanchow in the lower Yangtse area, Hankow, Hanyang and Wuchow higher up the Yangtse River, at Tientsin in eastern Hopei, eastern Shantung Province and around Canton in Kwangtung Province. Shanghai dominated China's industry. In 1932 a National Resources Commission had been set up to encourage industry. The Japanese invasion robbed China of most of her industrial development and the Chungking area of 'Free China' in Szechuan was stimulated.

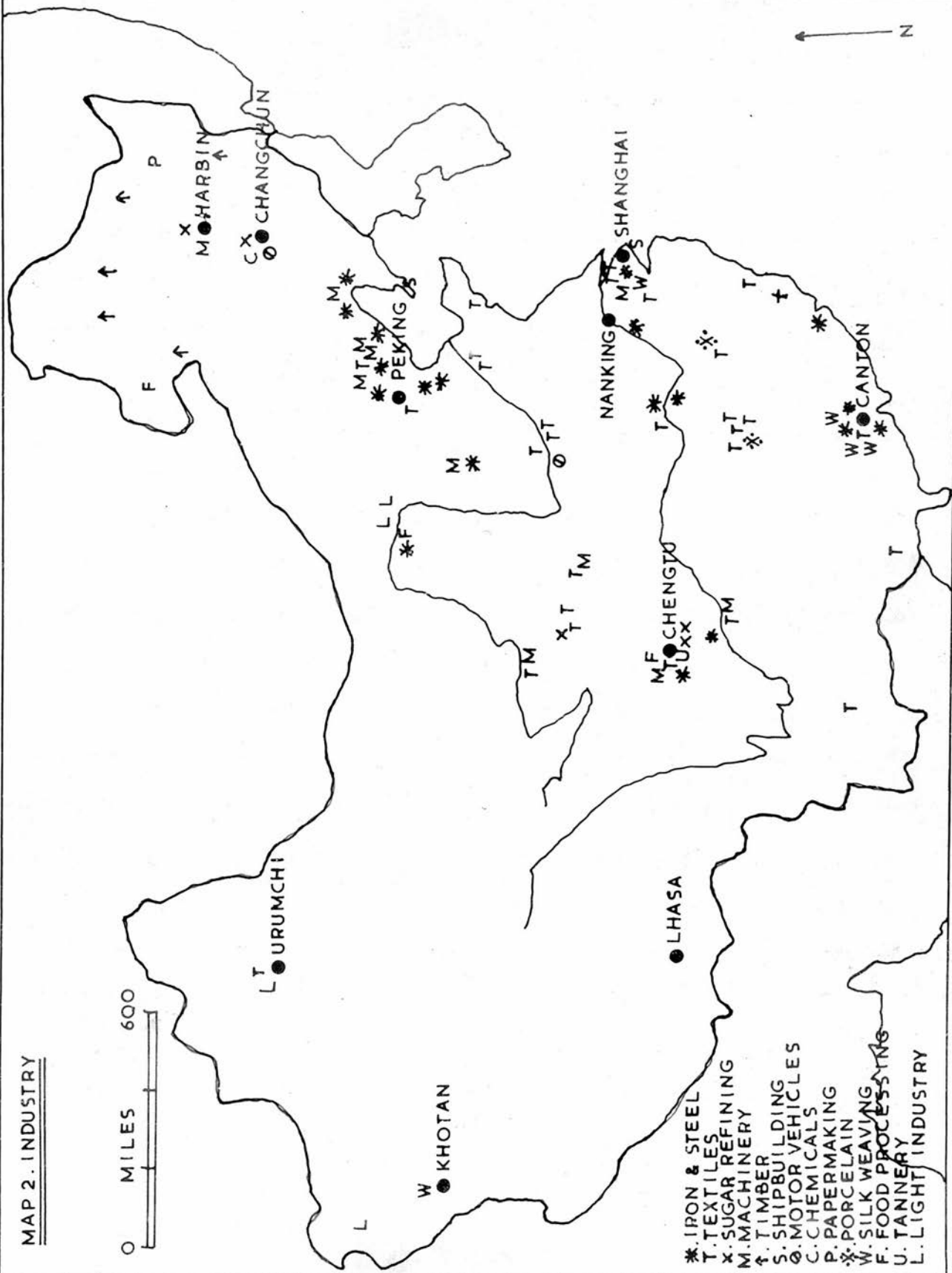
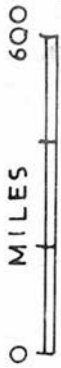
The Communists took over a war ravaged country in 1949. By 1953 China's key industries had regained their peak production figures of the prewar period. 1953 was the year of the First Five Year Plan which was elaborated in its scope in 1955. The decision was taken to expand heavy industry before all else. Industrial production increased in net value by 42% between 1952 and 1956. During 1953 to 1956 industrial capital investment increased by 316.7%, with capital investment in heavy industry within this category averaging an annual increase of 51.5%. Capital goods production increased between 1952 and 1957 by a little over 200% whilst consumer goods increased during the same period by only 85% and handicrafts by 69%. The emphasis upon heavy industry

during the First Plan can best be appreciated by the production figures. Steel output was 1,340,000 tons in 1952 and 5,240,000 tons in 1957. In 1952 13,700 units of steel cutting tools were manufactured whilst 29,100 units were in 1957. Similarly cement production rose from 2,860,000 tons to 6,700,000 tons, and coal production doubled. The comparative neglect in light industry over the same period is shown by the increases in cotton yarn (3,620,000 bales to 4,620,000 bales), and edible vegetable oils (980,000 tons to 1,100,000 tons). At the end of the First Five Year Plan China was supplying 88% of her own steel requirements and almost 70% of her machinery needs. The cost of this achievement was sorely felt in agriculture and the consumer industries.

The Second Five Year Plan was announced in 1956 and commenced in 1958. It was intended to cover the years 1958 to 1962 and ambitiously the targets were pushed upwards in 1957 and 1958. 'The Great Leap Forward' had been launched. In 1959 the upward curve of increased production became erratic. Agriculture was the weak spot with the Communes largely failing and floods and drought over the next two years adding to the burden. (Crop damage affected half the agricultural area).⁷ The use of village furnaces for the melting of pig iron increased the statistics, but the end product was largely unusable. The fulfilment of the Second Five Year Plan lacked the success of the First Five Year Plan and since 1961 Peking has not published any production figures. Despite the shift of emphasis to agriculture it seems likely that by 1963 steel production had passed the 20 million tons per annum mark, and electric power had reached 42,000 million Kwh by 1962. There has been a forcible movement of urban population back to the land, a

7. M.Freeberne: 'Natural Calamities in China'; Pacific Viewpoint Vol.3, No.2., September 1962, pp.33-71.

MAP 2. INDUSTRY



return of the Communes to collectives, although the Commune administrative unit has been retained, and incentive pay has been introduced. Party workers are being more adequately trained to take charge of economic units, and the possibilities of trade with the Western committed states being looked into. In a country where the average income per head of population is £16 per year it has been acknowledged that it would be difficult to ask the masses to tighten their belts further and so rapid industrial progress is being sacrificed for greater efficiency in agriculture which, after all, is the sector of the economy which provides the capital for any industrial expansion.

It has often been felt that China's progress in industry has been built upon Soviet aid. All aid from the U.S.S.R. to China has been in the form of loans and credits and they totalled the comparatively small amount of £718 million which is about a third of what the United Kingdom spends on defence in a year. Although Soviet help came at the right psychological moment it did not demonstrate particularly the much vaunted comradeship of the Communist world. China has been paying her way since the beginning of the Communist regime and so can claim to have a much more self-sufficient economy than her Asian rival of India. China is better able to afford the luxury of a hostile relationship with the Soviet Union than India is with the United States and Western Europe.

As Map 2 demonstrates the greatest preponderance of industry is still within the eastern part of the state, despite Peking's efforts to develop the west. The Peking, Shanghai, Canton and Chengtu areas have the greatest concentration of industry within China. It is within the regions of industrial development that the effectiveness of the political organisation is

the most impressive. The introduction of industry into an area such as Urumchi leads to a breakdown of the traditional culture which has its basis in the economy. If the herdsmen of Sinkiang are settled in new industrial developments the control of the Peking government within these areas becomes more effective. It is in those areas of mainly agricultural and pastoral economy that Mao's control is the most tenuous, and this includes most of the border areas. Peking's control of the northeastern industrial area up to the boundary with the Soviet Union is more effective than along most of the other border areas (one of the notable exceptions being the boundary with Hong Kong where again there is a concentration of industry). The development of industry implies the introduction of many factors of integration such as better transportation and a more concentrated population distribution, both of which make the act of government much easier.

Efforts to develop industrially the interior of China have been frustrated by the transport network. There is too great a dependence on the pre-modern dirt roads, rivers and canals. Draught animals, wheel barrows or human portage has to be used too often to turn the state into an efficient industrial society or to produce the unity of culture and outlook typified by the United States. Very few people in China have been beyond a 100 miles of the place where they were born. 'Low mobility renders Chinese society sedentary; each region tends to be a world in itself. This explains the amazing variety of dialects, folkways, and provincial traits. For instance, the northerner, accustomed to wheat or kaoliang, the mile-drawn cart, the desert wind from the Gobi, and the elegant Mandarin speech, is ill at ease in Central or South China, where everything seems strange to him: the all-rice diet, travel by river boats, the Wu and Cantonese dialects, and even the humid, subtropical air'.⁸ China's transportation system is improving and cutting down these

8. P.Kuo: 'China'; Oxford University Press, London 1963, p.16.



regional distinctions, but it is a slow process in such a large country where change is often resented, if not actively opposed.

China has less than 3 miles of railway per 100,000 people compared to 250 miles in the United States. Her motor highways are even less well developed. The greatest deficiencies are in the central and western provinces of the People's Republic (Map 3). As yet the transport system within China is not adequate to challenge the regionalism of many areas of the state. For example although the northeastern area is comparatively well served by railways the provinces of Inner Mongolia, Sinkiang, and Tibet and Chamdo accounting for well over half the length of China's political boundaries have just the beginnings of a transport system. For the first time Tibet has been tenuously attached to the core area of China by a road network, and a railway line has been pushed through Sinkiang and Inner Mongolia (Map 3). By Asian standards eastern China has a not unimpressive transport network, but it is far from the ideal a strong central administration must desire.

To overcome many of the inadequacies of the transport system the administration has made great use of aircraft so that it is possible to send an official from Peking to Lhasa in a matter of hours where once it took months. However, air transport is no substitute for an efficient land transport, more especially where the breaking down of local cultures and nationalisms is concerned. At present the poor transport network, notably in the western half of the state, prevents Peking's political influence from becoming as effective as it might expect to be. The strong policies made in Peking are modifying the geographical distributions in such border areas as Tibet and Sinkiang, but only slowly in the face of regional isolationism helped by a totally inadequate transport network. It is a relative matter; the boundaries provide more of a division within the geography of the border areas than they did before the coming to power of the Communist Party in China, but this division is

often hardly noticeable on the landscape. China is an economically backward country and this limits the administration's ability to impose its will upon the landscape. An economically sophisticated state like the United States can impose the will of the central government throughout its whole state area with greater ease if it so desires, but the government is backed by an economy which makes China appear to be just progressing from the Iron Age. For example by 1969 the United States will have 41,000 miles of superhighway, every mile of which will be superior to any road which China possesses, and the total a figure China could not dream of matching.

China is beginning to breakdown regional isolationism by introducing industry, more efficient agricultural techniques and a denser transport network, but only a beginning has been made on these. There still exists the more highly developed eastern part of the state and the backward western areas. The failure of agriculture to provide the sort of surplus needed to finance a fast industrial growth means that China's regionalism will take longer to counteract. Whilst Peking has such trouble finding capital to provide more roads and railways the isolationism of the Uighur in Sinkiang or the Tibetan challenges the administration's efforts to weld the state into an entity. There is still a lack of unity in the human geography of the Chinese state which defies the political administration from Peking and does not permit the political boundaries in most areas from making an effective division within the border landscape. The achievement of state unity depends to a large extent upon economic considerations.

SECTION THREE

CHAPTER ONE

The Boundary Categories

Keeping in mind the limitations of any form of generalisation it is possible to classify the states which share a common boundary with the People's Republic of China into four main categories defined according to the political sympathies of the governments concerned. The categories chosen are Minor Neutralist, Major Neutralist, Western Committed and Communist; the advantages of this simplification it is hoped will prove to outweigh the obvious disadvantages inherent in any attempt to classify individually unique phenomena.

The Minor Neutralist boundaries include the Sino-Afghanistan, Sino-Nepal, Sino-Bhutan, Sino-Sikkim, Sino-Burmese and the Sino-Laos. The criteria for membership within this division is a professed uncommitted stand in the ideological conflict between the Communist states and the so-called Western states, which largely follow the lead of the United States, plus a smallness in size, population and power, which means that the states concerned are at the mercy of their large neighbour China and offer the latter no serious challenge.

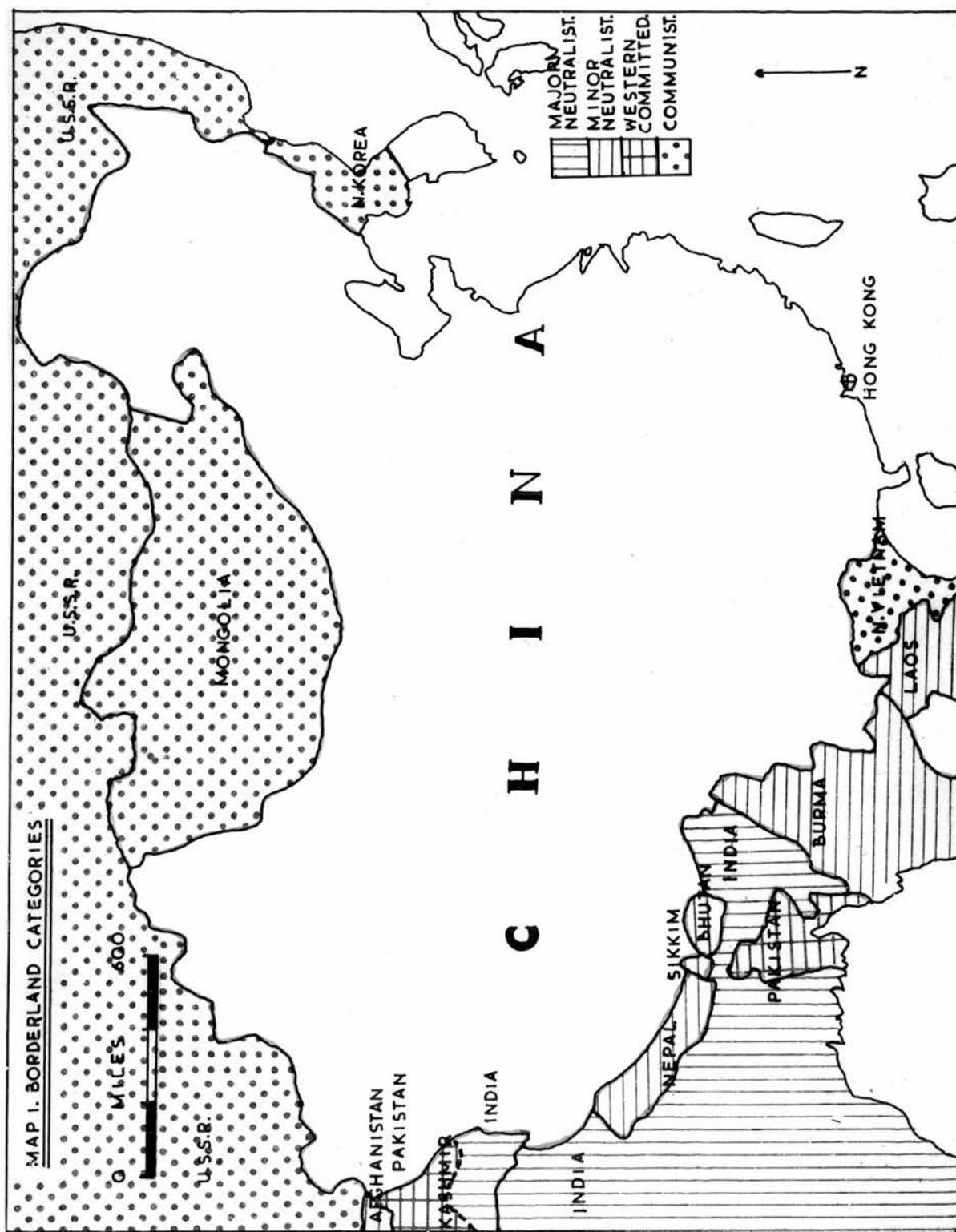
There is only one example of the Major Neutralist category and that is the Sino-Indian boundary. This, however, has been divided into two parts, the Sino-Northwest Indian boundary and the Sino-North East Frontier Agency example. The latter has been chosen for fuller treatment in Section Five. The difference between the Minor Neutralist and Major Neutralist divisions is one of size and power. As the resources and power of India are so much greater than those of the Minor Neutralist examples, China's

attitude towards this stalwart of the democratic system of government is different. India is the only state sharing a land boundary with China which challenges the latter's claim to supremacy in Asia. To a certain extent a difference of attitude leads to a difference of political impact on the geography of the boundary area involved; notably, since the Sino-Indian clash of 1962, both states have been active in the border areas with an energy which contrasts with, for example, the more casual attitude prevailing along the Sino-Burmese boundary where China does not feel herself challenged.

In many ways 'Western Committed' is an unsatisfactory description of the third category. It refers to those boundary states which are either directly ruled by a 'western' power (e.g. Hong-Kong) or are tied to the United States' camp by such anti-Communist treaties as the South-East Asia Collective Defence Treaty and the Central Treaty Organisation (e.g. Pakistan). The term 'Western' is inadequate for a geographer as it implies only a direction and is the outcome of the provincial outlook of Nineteenth Century Europeans. However, in this context it refers to the anti-Communist bloc of North America and Western Europe under the leadership of the United States. Within the Western Committed category Hong Kong is given fuller treatment in Section Six.

Theoretically the sharing of a boundary with a Communist state should be for China the ideal situation as the ideology implies that no boundary would then exist. But China and her Communist neighbours are all tinged with the anti-ideological blight of nationalism which complicates their relationships. Within the Communist camp it is possible to subdivide the states according to the rift between the Soviet Union and China. Kennan¹

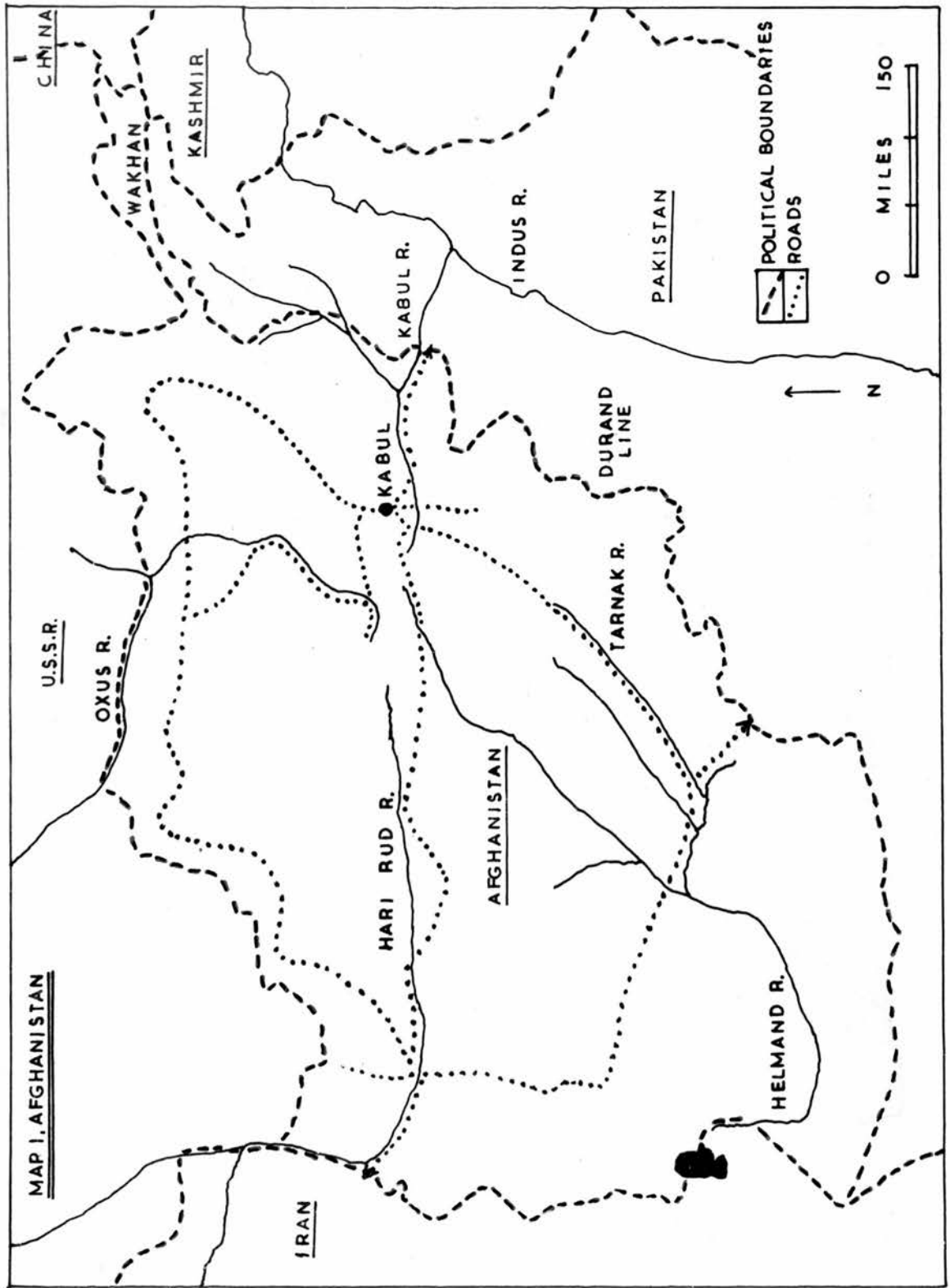
1. G.F.Kennan: 'On dealing with the Communist World'; Council on Foreign Relations & Harper & Row, New York 1964.



considers that Bulgaria, East Germany, Czechoslovakia, Poland, Hungary, the Mongolian People's Republic, Cuba and Yugoslavia amongst the Communist states are sympathetic towards the U.S.S.R. in the Sino-Soviet disagreement, Albania and North Korea support China, whilst Rumania and North Vietnam sit on the fence. It seems likely that North Vietnam would support Peking rather than Moscow should pressure be brought to bear, if only because of her position and the fact she shares a common boundary with China. As yet, despite the verbal displays, the attitude of the Communist states towards the rest of the world is not sufficiently divergent to make a Communist category ineffective. The Sino-Soviet, Sino-Korean and Sino-Vietnamese boundaries are dealt with in this section whilst the Sino-Mongolian boundary area is looked at in greater detail in Section Seven.

To simplify the distributional picture of the four categories it is useful to see the states involved on a map (Map I). All of China's northern and eastern boundaries dealt with in this study are shared with Communist states, with the exception of tiny Hong Kong. The other three categories' examples stretch in a line from Laos to Afghanistan, mainly in the southwestern area of China.

Although there are other ways of classifying the boundaries of China, for example by the physical characteristics of the boundaries themselves, it is felt that the simple one outlined here is useful and relevant. It is hoped that the classification's limitations will be made clear throughout.



CHAPTER TWO : THE BOUNDARIES

The Minor Neutralist Borderlands

1

The Sino-Afghanistan Boundary

During historical times what is now modern Afghanistan has held a strategic position as one of the crossroads within Asia. Before the sea routes between Europe and China gained importance the main east to west caravan road used the mountain passes of Afghanistan. It was also a highway of conquest, both for those powers coming from the east and west, and such later armies from the north as the Mongols and the Turks. It was here that during the Nineteenth Century A.D. the Empires of Tsarist Russia and British India met.

Land-locked Afghanistan shares a common boundary with Iran in the west, the Soviet Union in the north, Pakistan and Kashmir in the south and east, and with the People's Republic of China for a modest distance in the north-east (Map I). The Sino-Afghanistan boundary is the outcome of Anglo-Russian diplomacy during the latter half of the Nineteenth and early part of the Twentieth Centuries. The British East India Company had approached the King of Kabul during the early Nineteenth Century and had concluded a treaty with the Afghans in 1809. During the next thirty years Afghanistan was divided by domestic troubles, but then Dost Muhammad gained control of the throne and in 1837 appealed to the British to assist him in expelling the Persians from his territory. The British declined to help as the Amir had previously tried to get Russian and Persian help to regain the Plain

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1. Much of the historical and political material in this chapter is based on Aitchison (C.U.): 'A Collection of Treaties, Engagements and Sanads Relating to India & Neighbouring Countries', Calcutta 1933, and 'Papers Regarding Hostilities with Afghanistan'; H.M. Stationery Office, London 1919.

of Peshawar from the Sikh Ranjit Singh. From 1838-42 the First Afghan War was waged by which the British replaced Dost Muhammad with his rival Shah Shuja. Russia refused to help the Afghans which led to a mistrust only rivalled by the dislike of the British following the occupation. It was from this time that Afghanistan foreign policy began to be dominated by Russo-British rivalry, and the related problem of saving the state from being swallowed up.

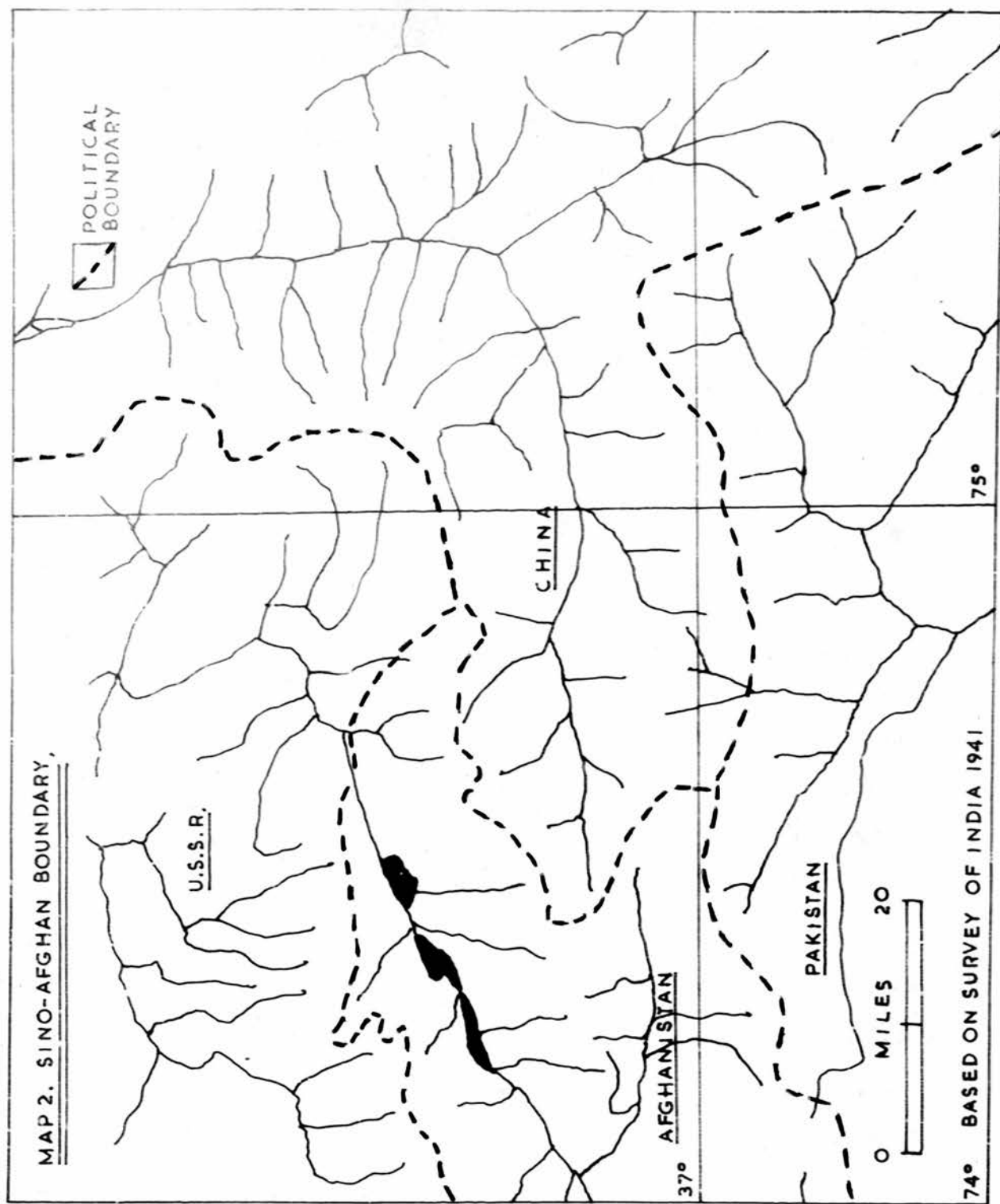
The outbreak of the Crimean War led the British to view Afghanistan more favourably and in 1855 a temporary treaty of alliance was concluded with Dost Muhammad, which became a formal agreement concluded at Peshawar in 1857. Both these treaties were a defensive measure against Persia, which in 1856 had taken Herat and so started a war with Britain. The Peace Treaty of Paris signed in March of 1857 recognised the independence of both Persia and Afghanistan.

The 1860's saw the rapid advance of Russia southwards, reaching Samarkand in 1868 at a time when Afghanistan was again weak from internal troubles following the death of Dost Muhammad. In 1869 Shir 'Ali managed to establish his throne on a firm basis, but Russian influence had already reached the River Oxus. The Anglo-Russian Agreement of 1873 was concluded in which the Russians agreed to acknowledge the Oxus as the limit of their southern expansion. Shir 'Ali's request for British guarantees of Afghanistan territory was refused, a snub which led the Afghans to favour Russia and the admittance of a Tsarist envoy to Kabul. Shir 'Ali would not allow a British mission to enter his country which sparked off the Second Afghan War of 1878-80 and led to a British occupation. But as in the First War a bitterly hostile population made the British position untenable and a re-

laxation of the Russo-British enmity led to the withdrawal of British troops leaving the state governed by Shir 'Ali's nephew Abdur Rahman. Afghanistan appears to have represented the difference between profitable and unprofitable territorial acquisition for the British in India, and so occupation was given up when it was felt sufficient control had been gained over Afghanistan's foreign policy. The treaty of Gandamak, signed on May 26th, 1879, was followed in June and July of the next year by further negotiations with Abdur Rahman in which it was agreed that the Amir should be free to exercise his control over domestic policy, but bound to follow British advice on foreign policy. Afghanistan had become a British 'buffer state'.

The Russians were stimulated into action by these British moves in Afghanistan, annexing Khiva in 1881, Merv in 1884 and invading Afghanistan in 1885. The British mobilised two army corps in India and war seemed imminent. However, both the Great Powers resorted to diplomatic means of settling their differences and an Anglo-Russian Agreement was signed in St. Petersburg in July 1887. Further military operations along the Afghan boundary by the Russians in 1889 led to a British warning. In 1891 the Wakhan region in Northeastern Afghanistan became a focus of Anglo-Russian rivalry. Once again diplomacy saved Russia and Britain from war and in the 1895 Agreement Wakhan was recognised as part of Afghanistan.

Endeavouring to increase her influence within the country Russia proposed to Britain that she should have direct relations with Afghanistan, a suggestion which was promptly turned down. In 1901 Abdur Rahman died, to be succeeded by his son Habibullah who repudiated his obligations under the Anglo-Afghan Agreement, whilst continuing to draw from Britain the annual stipend of £1,800,000. With Russia's defeat at the hands of Japan in 1905 the Amir's attitude towards foreign powers became less favourable, whilst



predisposing both Russia and Britain to seek some sort of settlement in Asia. Not only was there an effort to negate Anglo-Russian rivalry in Afghanistan, but also in Tibet and Persia.

The resulting Russo-British Convention signed in St. Petersburg in 1907 saw the setting up of the Wakhan Corridor to prevent Russia or British India sharing a common boundary, and thus also produced the somewhat curious Sino-Afghan boundary of the present (Map 2). Habibullah was not consulted on these territorial changes, but in 1908 Russia stated emphatically that whether the Amir's agreement was given or not St. Petersburg would honour the Convention. Much wood was added to the fire of growing Afghan nationalism.

During the First World War Afghanistan was committed to neutrality, but supported by the Afghan nationalist movement from 1916 the Amir began to demand the representation of his country at the forthcoming peace talks. In February of 1919 Habibullah wrote once again to the Viceroy of India asking for the "Absolute liberty, freedom of action, and perpetual independence² of his country". Before any answer came the Amir was assassinated. His third son Amanullah came to power and declared war on Britain the same year (The Third Afghan War). Britain was in no mood for such a costly undertaking so, after bombing Kabul, when the Amir asked for an armistice London agreed. A Peace Treaty was signed in Rawalpindi in August 1919, followed in November of 1921 by a permanent Anglo-Afghan Treaty. By this agreement Afghanistan once more gained control over her foreign policy. A similar treaty was signed with the Soviet Union in February of 1921. Afghanistan's boundaries on achieving full independence remained much the same as they had been before, despite empty promises by the Soviet

2. D.N.Wilber (ed.): 'Afghanistan'; Human Relations Area Files, New Haven 1956., p.147.

Union to return the Panjdeh district taken by the Tsars in 1885. In July of 1923 Afghanistan concluded a commercial treaty with China, a country much neglected in the previous diplomatic moves despite her interest in Sinkiang.

Up to and including much of the Second World War Afghanistan became a centre of international rivalry, more especially between the Axis powers of Germany and Japan, and Britain, the Soviet Union and the United States. But in 1944 China once more came back onto the scene and opened diplomatic relations with Kabul, signed a treaty of friendship and started commercial negotiations. However, since 1949 the new Communist regime in Peking has not shown the same interest in Afghanistan as it has in some of the states with which it shares a longer border, such as Burma and Nepal.

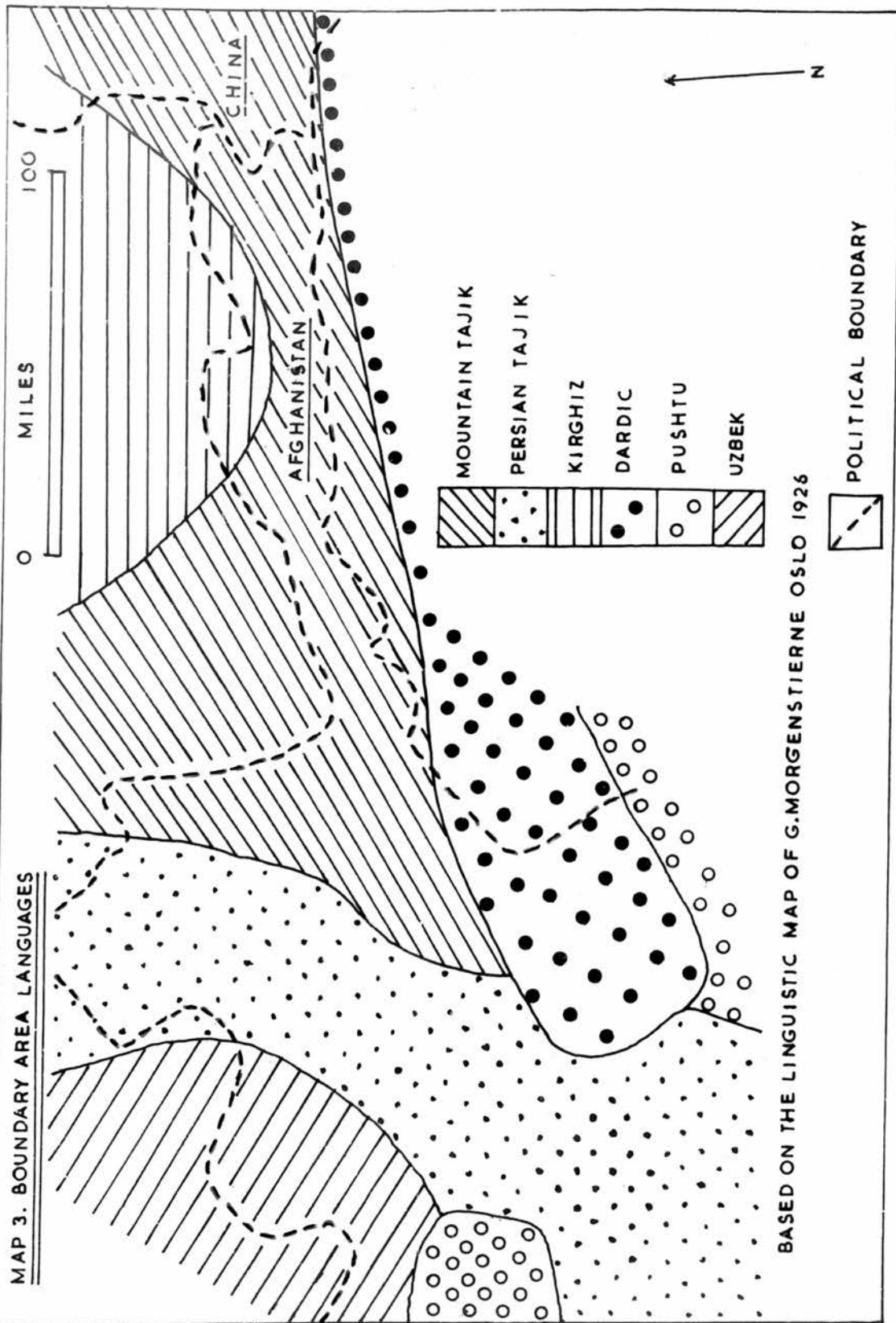
Where once Afghan foreign policy rested upon playing off Britain and Russia, it now continues in a similar vein but with the United States taking the place of the United Kingdom. There is a non-aggression pact with the Soviet Union (1951) and Afghanistan from 1955 has been enjoying a long term loan, with low interest rates, granted by Moscow to the tune of about £35 million. Similar agreements with America have led to there being more United States technicians in Afghanistan than any other foreign nationality. Probably because of her limited resources China has not as yet participated to any great extent in the influx of foreign aid and technicians, and whether the cooling of relations between Peking and Moscow will change the Chinese attitude remains to be seen.

Sinkiang is very much a pioneer area for the Chinese, and the Wakhan Corridor has the appearance of being an appendage to the main bulk of the Afghanistan state area. The Russo-British creation which is the boundary between Chinese and Afghan territory has as yet been neither successfully

accepted by the people of the region, nor its authority imposed effectively by the Chinese and Afghan Governments. The main function of the Wakhan corridor is no longer applicable to the modern situation since the end of British rule in India. The territorial rivalry between what was once the Tsarist Empire and the British Raj is no more. The Wakhan appendage to the Afghan state is a left over from a former age and, by association, so also is the Sino-Afghanistan boundary. As Map I demonstrates the Wakhan corridor might have served well the function of keeping from direct territorial contact the British Raj and the Tsarist Empire, but today it has little validity. Therefore, when trying to think in terms of 'functions' regarding the Sino-Afghanistan boundary none come readily to mind as but for the former Anglo-Russian rivalry during the 19th and early 20th Centuries there would now be no boundary between Afghanistan and China for probably the Wakhan Corridor would have been absorbed by either the Soviet Union or incorporated into Pakistan or India.

Afghanistan itself is a land of 264,000 square miles, 770 miles from east to west and 350 miles from north to south. The main orientation of the state is from northeast to southwest following the thrust of the Hindu Kush massif from the Pamirs to the Persian boundary. The great mountainous area of Afghanistan can be divided roughly into two, the Hindu Kush proper, which descends from the Pamirs and ends near the Persian border, and the Kuh-i Baba Mountains which is a continuation of the Hindu Kush in the heart of Afghanistan. In the north the mountains are bounded by the Amu Darya Valley steppeland. South of the main massif there is a network of ridges, plateaus and valleys. Much of the rest of the state in the

MAP 3. BOUNDARY AREA LANGUAGES



west (about 40,000 square miles) is desert at 2,000 feet in elevation.

The Sino-Afghan boundary (Map 2) is in its northern section along the crestline of the Little Pamir Mountains. Its central section is across the upper Wakhjir River Valley, and in the south it again resorts to the use of a mountain crestline (Murkushi). In a region abounding in mountain crestlines and river valleys the choice of physical features for border delineation is not of great geographical significance, notably as it does not represent a cultural, or economic, or historical divide. The boundary itself, as it favours the use of physical features in its delimitation (it is not demarcated), can therefore be classified within Boggs' 'Physical' category or Hartshorne's 'Subsequent'.

The mountainous areas shared by Afghanistan's Wakhan Corridor, the Badakhshan region of the U.S.S.R., China's western Sinkiang and Jammu-Kashmir have much in common to make them separate from their respective state areas. During historic times the areas have had a function as a refuge for those peoples driven out of the plains which surround the mountains.

Being something of a backwater the Sino-Afghan border area has not been as well researched as even certain other areas of Afghanistan. Nevertheless it is possible to make some attempt at carrying out a cultural description of the region. The Wakhan-Sinkiang boundary area is mainly the domain of the Tajiks (Map 3). There are two principal groups of Tajiks in Afghanistan, and those who inhabit the boundary area are known as the Mountain Tajik. The Mountain Tajiks speak an archaic Iranian language and may well have been the original Iranian inhabitants of Afghanistan. The Tajiks to the west were gradually conquered, but those within the inaccessible mountain core remained largely their own masters. Up until October of 1929 the Tajik chieftain, Bacha Saggio, was able to dominate and terrorize the Wakhan-Sinkiang region.

The Mountain Tajiks are of above average height and slim build. The skin is light brown and the hair may range from straight to curly, and from black to red or blond. The eyes are usually brown, but may be blue. The head form is broad and the nose aquiline. The Tajiks to the west and most of the surrounding peoples are Sunni Moslem in religion, but the Mountain Tajiks are Shi'a Moslem. Whilst the Pamir Tajiks speak a language only related to Persian, the plains Tajiks speak a tongue very similar to that used in eastern Iran. The Mountain Tajiks are village dwelling cultivators noted for their poverty. There are perhaps 75,000 people speaking the Pamir languages (Shughni-Roshani, Wakhi, Munji-Yidgha and Ishkashmi) of which 45,000 are within Afghanistan.

Some of the Mountain Tajik areas have been modified in the border region by an influx of Turkic speaking peoples who were Mongoloid in appearance. Notable in the boundary area have been the nomadic Kirghiz who still 'move freely in their seasonal migrations across the unpatrolled mountain borders of Afghan³ Wakhan, Soviet Kirghizia and Chinese Sinkiang'. In Afghanistan they number perhaps 30,000 persons. Little information is available on the Kirghiz in any of the states.

The Dardic speaking Kafirs are of greater importance in the Sino-Pakistan and Afghan-Pakistan boundary areas, but are worth mentioning as there are some scattered groups along the Sino-Afghan boundary. The Kafirs are now officially called Nuris following their forced conversion to Islam in 1896 when they were defeated by Amir Abdur Rahman, and their region is named Nuristan, which means⁴ 'land of light'. The Kafirs are a little above average height, slim with black

3. D.N.Wilber (editor): 'Afghanistan'; Human Relations Area Files, New Haven 1956; p.51.

4. Little has appeared in print on the Nuris since G.S.Robertson's 'The Kafirs of Hindu-Kush', published by Lawrence & Bullen, London 1896, and this text has been used here.

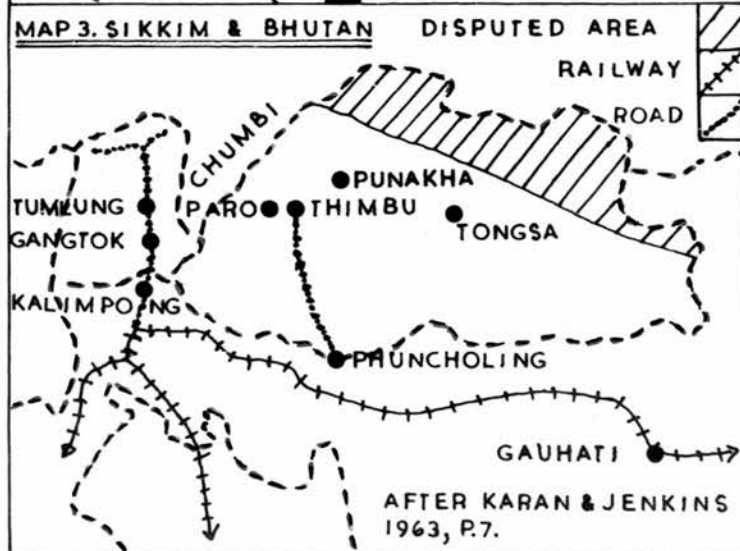
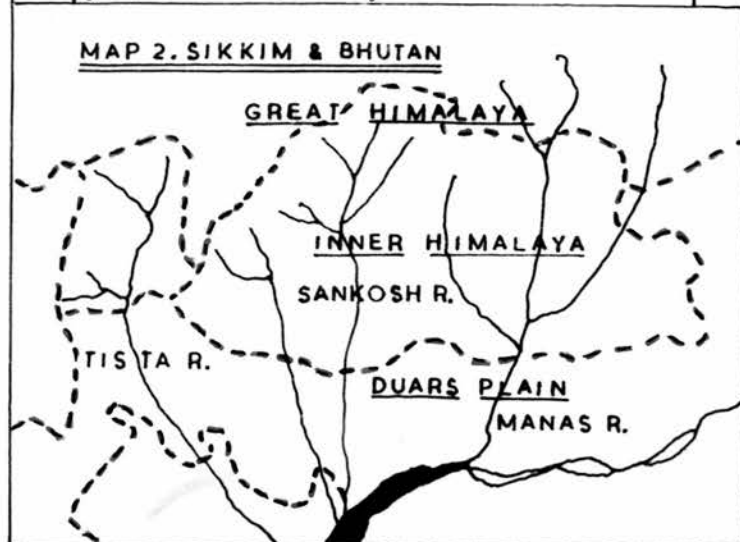
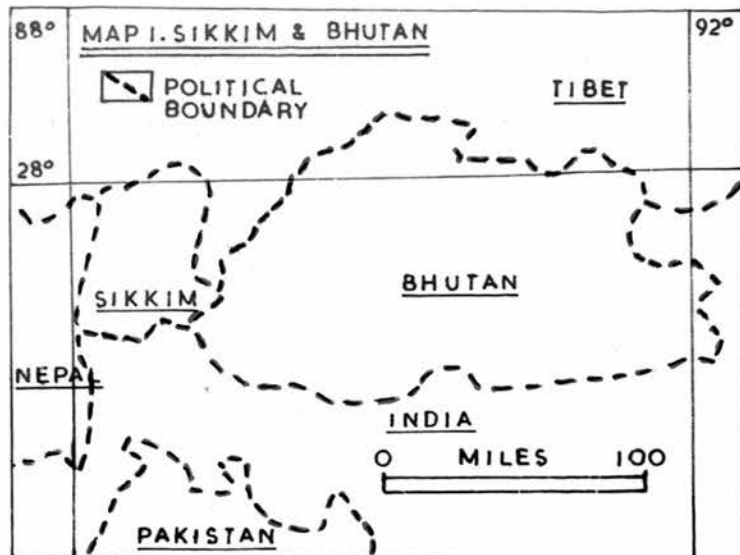
hair which may be straight or wavy. The skin colour is medium brown and the nose slender and straight. Their economy is based on goats and cattle, although they cannot be termed nomadic. They live in wooden houses, often of three storeys with a verandah arrangement on the top one. All the Kafir tribes may number 60,000 persons, and speak a diversity of dialects of a language related to ancient Sanskrit. Being still largely outside effective state jurisdiction the Kafirs recognise only allegiance to the tribe.

The boundary has been of greater significance in the Tajik areas where a settled farming economy makes it economically more acceptable; the Tajik cultivator has no reason to move much from his village area, and the tribal loyalties are not as strong as with the Kafirs. The main spread of the latter is across the Afghan-Pakistan boundary (after Afghanistan the Chitral area of Pakistan has the biggest number), and so it cannot be stated that there has been any Kafir problem between China and Afghanistan. The group which totally ignores the Sino-Afghan border is the Kirghiz, and for the simple reason that a nomadic animal economy demands mobility without hindrance. Whether the Government of the People's Republic of China will change their present policy of permitting the Kirghiz freedom of movement cannot be said, but the Sino-Soviet controversy has led to the successful imposition of the political boundary in those areas of nomadic tribes along the Sinkiang-Soviet Central Asia border. Should a similar hostility arise between Afghanistan and China Peking would probably not be above sacrificing economic considerations for political.

In 1956 Afghanistan launched upon its first Five Year Plan. There are no railways in Afghanistan, but since 1956 road building has figured prominently in economic development. About 600 miles of roadway has been asphalted,⁵

5. British Survey: 'Afghanistan'; No.201, May 1961, p.14.

and other forms of communication such as telephone, telegraph and postal services extended. But, as is shown on Map I, no attempt has been made in the area of the Wakhan Corridor to attach it by means of communications to the core area of the state. Political administration from Kabul within Afghanistan is often ineffectual, but nowhere is it so tenuous as in the area of the Sino-Afghanistan boundary. Here a separate existence is followed by the tribesmen happily oblivious of their state loyalties and giving allegiance only to their cultural group. Every aspect of daily life from trade to marriage is concluded on a local basis with the various boundaries and state administrations having little or no influence. Afghanistan has more pressing problems than the effective administration of the Wakhan Corridor, and China is apparently as yet unwilling to make the effort necessary to impose her administration within Sinkiang up to the boundary line with Afghanistan.



The Sino-Sikkimese Boundary

The political geographer who first ventures into a study of the Himalayan kingdoms of Sikkim and Bhutan (Map I) may well be surprised that these two small states exist at all. In fact their survival is largely due to the British policy in the Nineteenth Century of setting up a 'buffer' zone between the rising power of the British Raj and the supposedly impressive power of the Chinese Empire. In 1947 India followed the example of the British Raj and left Bhutan and Sikkim to their nominal independence.

The small kingdom of Sikkim is of little importance except for the significance of its geographical position. It lies between Tibet, Nepal, India and Bhutan and commands a number of passes such as that of Nathu La which lead into the core area of Lhasa. Sikkim's dominance of the Lhasa to Kalimpong trade route often led to foreign interest in its affairs, but nevertheless the country has managed to retain a certain amount of independence. As one of the centre pieces in the critical region between India and the People's Republic of China Sikkim represents an interesting example of the importance of geography in international politics.

During the Thirteenth Century A.D. Lepchas from the Assam hills began immigrating into the Sikkim area, but it was in 1641 that the country was first welded into the beginnings of a political unit when the Lama of Lhasa and some colleagues converted the population to Buddhism and appointed Penchoo Namgyal the first ruler. Until this time Sikkim had been a vassal area of

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1. The following references have been important in writing the section on Sikkim: P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms', Van Nostrand, Princeton 1963; D.Shellgrove: 'Himalayan Pilgrimage', Bruno Cassirer, Oxford 1961; D.Deig: 'Sikkim: Tiny Himalayan Kingdom in the Clouds', Nat. Geographic Mag; Vol. 123; March 1963. Gov. of Sikkim: 'Second Five Year Plan 1961-1966', Gangtok 1961; J.C.White: 'Sikkim & Bhutan; 21 Years on the North-east Frontier 1887-1908'; Edward Arnold, London 1909.

Tibet. The early history of the state was bloody; during the reign of the fourth ruler Chogyel Gyurme (1717-1734) the Bhutanese plundered Sikkim and carried off a large part of the population into slavery. Following the Gurkha victories in Nepal they began a thrust into Sikkim. At this time during the latter part of the Eighteenth Century Sikkim was much larger than it is today, including eastern Nepal, Tibet's Chumbi Valley, part of Bhutan and the Kalimpong and Darjeeling districts of India. During 1788-89 the Bhutanese invaded from the east and the Nepalese from the west and Sikkim's territories were reduced.

The seventh ruler of Sikkim was Tsugphu Namgyal who came to the throne in 1793. In 1814 a British force came to the aid of Sikkim and defeated the Gurkhas. Following this the 1817 Anglo-Nepalese peace treaty established the boundary between Nepal and Sikkim. In 1835 in a gesture of friendship towards the East India Company the Sikkimese king gave the Darjeeling hills to Britain. As compensation the British gave the king an allowance of 3,000 rupees a year which was doubled in 1846. The action of the ruler in granting the British the land south of the Great Rangit River led to a strong Tibetan reaction. Tibet still regarded Sikkim as a vassal state and considered Sikkim's gift to the East India Company as illegal. Tibet prohibited the Sikkimese rulers from visiting Lhasa (of great religious significance to the Sikkimese) more than once in eight years.

The ill treatment of a party of British officials in Sikkim in 1849 led to the advance of British troops on Tumlung (Map 3) which was then the capital of the state. After this incident British power in Sikkim increased rapidly and by the Treaty of 1861 Sikkim was made a protectorate of Britain with foreign policy in the hands of the latter. The 1886 incursion of the

Tibetans into Sikkim resulted in a British force marching on Lhasa in 1888. At the end of the British expedition into Tibet the Indian Government sent a political officer to rule Sikkim in co-operation with the local officials. The power of the Maharajah was considerably curtailed by this action and the kingdom was under the control of Britain, although in theory it was independent.

A dispute between the ninth ruler and the British Resident led to the fleeing of the Maharajah to Tibet in 1892. However, the disagreement was settled and the four rulers who have been nominal rulers in Gangtok since have allowed the real power to remain with the Residents. Due to its strategic significance foreigners were only allowed into Sikkim by permission from the British, a policy which India has followed since gaining independence in 1947.

As with so much of her northern border India inherited the British policies following 1947. In 1950 the Indians signed a new treaty with the Maharaja Tashi Namgyal which makes Delhi responsible for all of Sikkim's external affairs, strategic communications and defence. Continuing British practice India also has a permanent resident in Gangtok.

Sikkim is politically dominated by India and as such has been thrust into the front ranks of the latter's dispute with China. However, in contrast to the rest of India's northern border commitments, Sikkim has the advantage of having a boundary with China which has been both delimited and demarcated (by posts) following a boundary treaty between Britain and China in 1890. Although China might make claims to Sikkim on the basis of the area having once been a vassal state of Tibet, the boundary can only be challenged if Peking refuses to recognise the 1890 Sino-British agreement.

Sikkim is a gateway to India (Map 3) which has led to an increase of Indian troops in Sikkim. Local opinion demands that Sikkim should have more say in the defence of its boundary with Tibet and so in 1961 India agreed to train and equip a Sikkim militia to guard some of the border roads, a move which had very favourable reaction to India within the small state.

China's wooing of Sikkim has been marred by the arrival of 7,000 Tibetan refugees since 1959 in northern Sikkim. However, China possesses two useful weapons in that Peking has made much of the need to free Sikkim from India's domination, and the ethnic similarities between much of Sikkim's population and that of Tibet.

The climate is harsh and the surface features restrictive. Basically Sikkim is a basin of about 40 miles wide enclosed between two dissected ridges running north to south for about 80 miles each. In the west the Singalila ridge is the division between Sikkim and Nepal and includes Mount Kanchenjunga at 28,168 feet in height. In the east the crest of the Donkhyia Range is used as a boundary between Sikkim and Tibet. In the north the crystalline Great Himalayan mountains form a dividing arc between Tibet and Sikkim's central basin. To the south the basin is blocked by the Darjeeling ridge through which the Tista River has carved a gorge near Kalimpong (Map 2). Sikkim is open to the full impact of the Southwest monsoon which brings 200 inches of rain to the basin per year. The Tista and its tributaries have deeply dissected the Sikkimese highlands until it has formed the central basin. The Kanchenjunga Range 12 miles south of the Great Himalaya is a distinctive unit within Sikkim. The vegetation ranges in Sikkim from the tropical luxuriance of the valley bottoms through subtropical and temperate zones to the alpine varieties higher up the mountain slopes. Cut off

from Tibet by the Great Himalaya range, and from India by forest covered hills Sikkim can claim a certain individuality with regard to its physical geography.

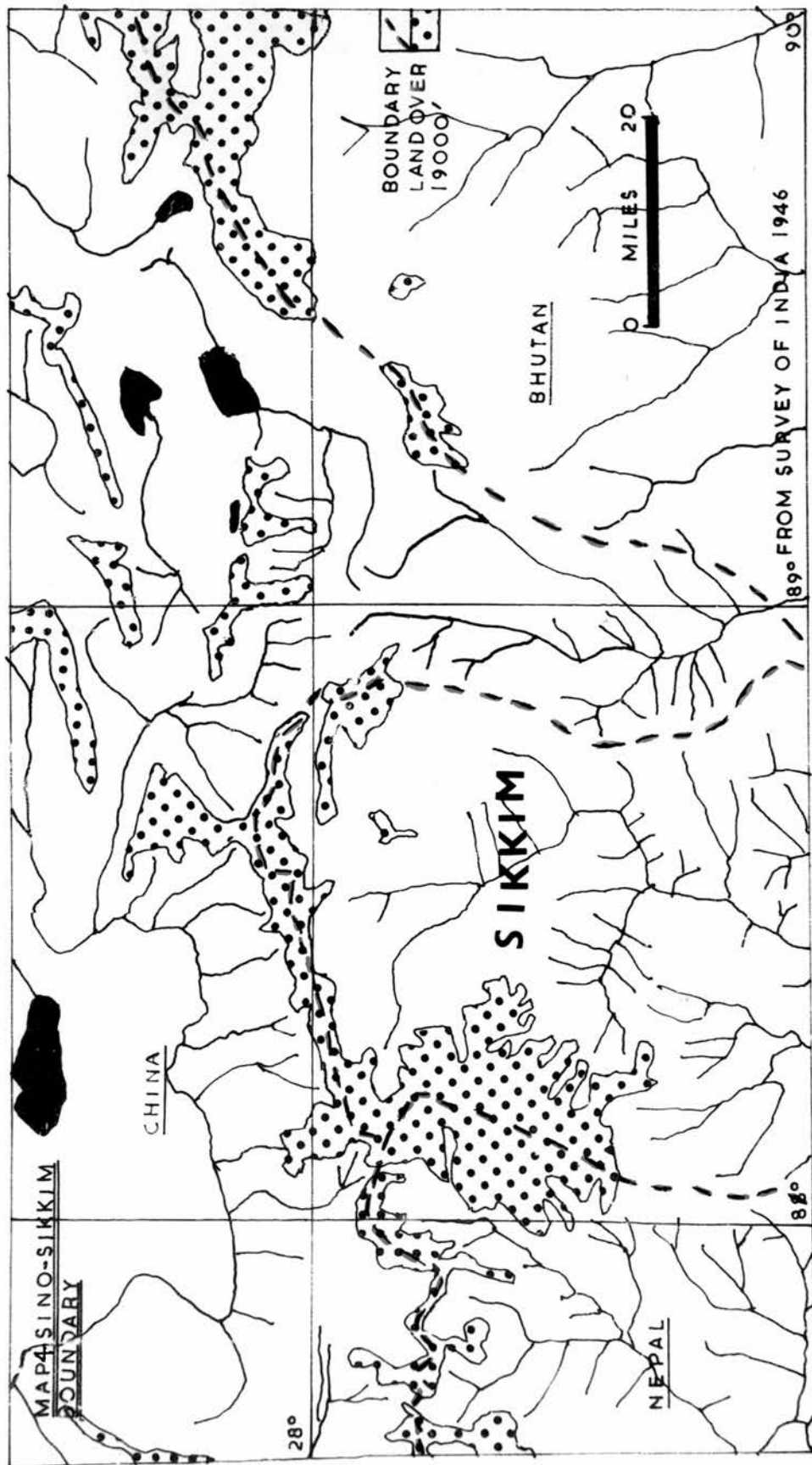
The Sikkimese are descended from Lepchas, Nepalese and Indians; as with Bhutan both Mongoloid and Caucasian racial types are present. The Lepchas include such tribes as the Dupka. They comprise a little over 20% of Sikkim's total population of about 170,000 persons. In the late Nineteenth Century the British encouraged the immigration of Nepalese into Sikkim so that today these represent the largest element in the population and account for 60% of the people; they are Hindus in contrast to the Lepchas who favour the Lamaist form of Buddhism from Tibet. It was not until 1961 that the Nepalese were given Sikkimese citizenship, and they are forbidden to settle in the northern valleys. The 1961 Sikkim Subjects' Regulation divides the population into three racial categories of Lepcha, Bhutia and Tsong. Bhutia was the term applied to immigrants from Tibet and Tsong to the persons who were not of Lepcha or Bhutia origin. The Indian community is small but wields much economic power in the state. The bulk of the population is to be found in the southern half of the state area.

The Lepchas used to cultivate small patches in the forest lands by means of cutting down trees which were then burnt and corn, millet and buckwheat planted. Game, fruits and tubers supplemented what the Lepchas grew. With the influx of the Nepalese large areas of forest were cleared and rice grown which inhibited the Lepchas' living space and led to the tribe becoming more sedentary and relying less on hunting and gathering. The Lepchas are timid and badly equipped to counteract the vigorous invaders from the north and

west. The Bhutias have pushed the Lepchas down from the higher lands to the forests and lower valleys. This has led to a certain amount of animosity between the Lepchas and Bhutias and the Lepchas and Nepalese.

The state religion of Sikkim is Tibetan Buddhism, but it is followed by only 28% of the population in contrast to 60% of the people being Hindus. There is a certain amount of ill feeling between the two religious groups which is further emphasised by cultural and ethnic contrasts. The official language of Sikkim is English although only a small educated elite speak it. The two main languages of the people are Sikkimese and Gurkhali which again leads to a division within the population. However, Sikkim does have an advantage over its neighbour Bhutan that the educational programme is more advanced and illiteracy not such a tremendous problem to a government endeavouring to bring about political unity within the state area.

From the appointment of a British political officer to Gangtok in 1888 the Sikkimese economy has developed. In 1906 Gangtok was linked with India by the first road able to take wheeled traffic. The British introduced a revenue system, extended the cultivated land area considerably and saw to the building of various public works. Since the British withdrawal India has been supplying the capital and technicians for Sikkim. Between 1954 and 1961 Sikkim had a Seven Year Plan which was successful enough to encourage a Five Year Plan to follow (1961-66) calling for about £6 million of aid from India. In both these Plans great emphasis was laid on the improvement of communications, agriculture, mineral surveying and the development of forestry (a third of Sikkim's 2,828 square miles is forested), plus electricity (mainly from hydro-electric stations). But the crucial feature of the Plans has been communications; half the expenditure of the First Plan was



on highways. In 1962 the 150 mile North Sikkim Road (Map 3) was opened linking Gangtok with Sikkim's northern territories; an enthusiastic India financed it and Indian Army engineers designed it.

The Sino-Sikkimese border zone is a problem for both India and Sikkim. Sikkim at the last Census (1961) had an average density of 59 persons per square mile, but the northern zone contained only 65 towns and 7 villages with over 500 persons as compared with the western zones 254 towns and 65 villages. The isolation of the small settlements in the mountain valleys of the Great Himalaya chain defy government control from Gangtok. The hamlets are self-contained and often cluster around a small monastery. The 50,000 people in the Gangtok area may be beginning to think of themselves as Sikkimese, but such ideas do not reach many of the northern settlements. The Maharajah is advised by an Indian Government representative as Premier and Indians are in most of the chief civil service posts. There is resentment of India amongst many of the educated elite of Sikkim, so although India completely dominates Sikkim at present her position is not unchallengeable. Efforts to move towards self-rule by a popular assembly have been limited because of the ethnic divisions; the Sikkimese leaders either work solely for themselves or else just for the particular ethnic group from which they come, but never for a united Sikkim. Similarly there is some justification in believing that Indian administrators often serve their country better than Sikkim's best interests.

The Sino-Sikkimese boundary (Map 4) itself runs along the Great Himalaya crestline which separates 'the waters flowing into the Sikkim Tista and its affluents from the waters flowing into the Tibetan Mochu and northward into

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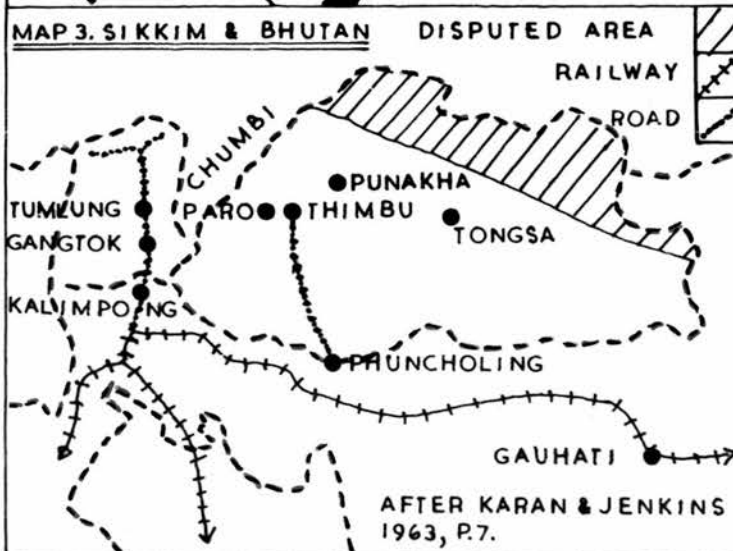
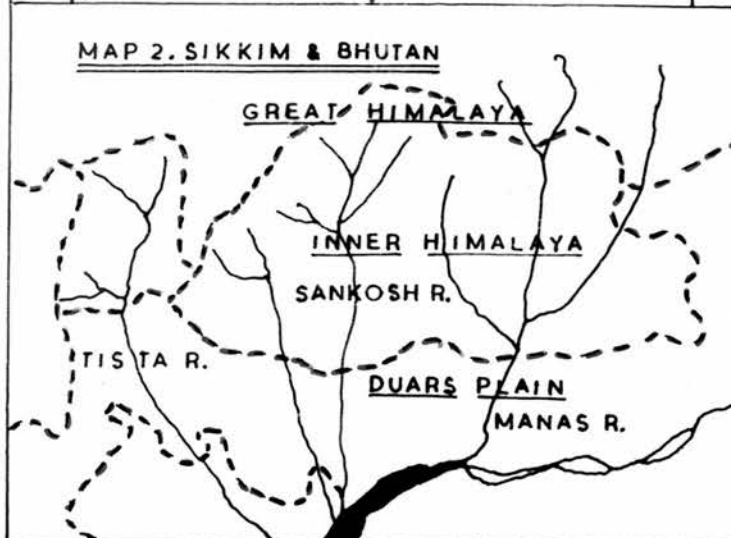
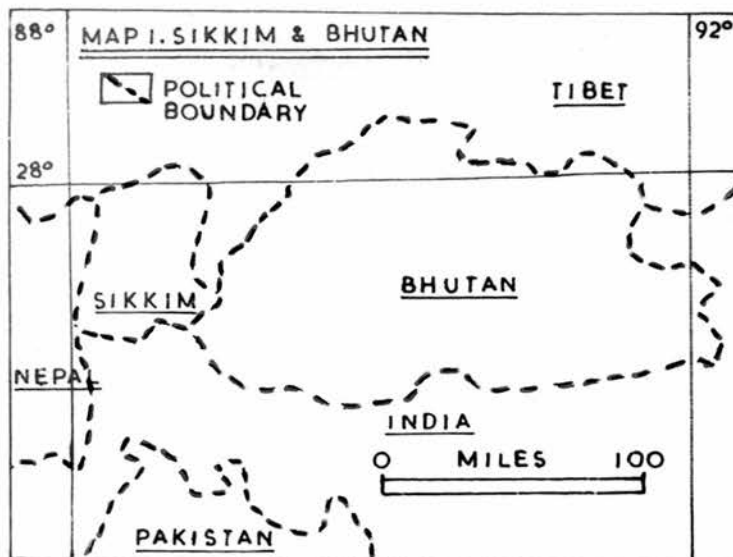
the other rivers of Tibet'. It can therefore be placed in Boggs' 'Physical' category or Hartshorne's 'Subsequent' division of boundary type. Despite the boundary having been delimited it has not made much impression upon the landscape, although there has been some change since 1951 with the advent of Chinese Communist power in Tibet. The population in the border area on both sides of the boundary is Tibetan, but the Chinese have put an end to the freedom of movement between Tibet and Sikkim which prevailed before 1951. Since the 1962 Sino-Indian border clash there has also been increasing political activity on the Sikkimese side of the boundary, greatly assisted by the new road to the northern areas of Sikkim. It would seem likely that in the future there will be greater cultural contrasts between the populations on either side of the Sino-Sikkimese boundary.

Political unity is far from achieved within Sikkim due to the hostilities between the various national and tribal groups. There is the central government area of effective administration around Gangtok which caters for the majority of the population, but it cannot be claimed that the political machine is as yet fully effective in the isolated northern territories.

Sikkim is a satellite state of India as yet lacking in effective political unity. It is a left over from the Nineteenth Century and probably only survives at all because of a decision taken in 1861 whereby Sikkim became a British protectorate rather than an integral part of British India. India had tended to leave much as she inherited it from the Raj in 1947, and Sikkimese nominal independence is something which therefore survives. The development of an internal road system will assist the government's efforts to weld the state area into a political unit, and the imposition of

2. P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms'; Van Nostrand, Princeton 1963, p.77.

the boundary upon the landscape will cut Sikkim's Tibetan population's ties in the north, but Sikkim's survival as a state depends to a great extent on the attitudes of her northern and southern neighbours.



The Sino-Bhutanese Boundary.

Bhutan covers an area of 18,000 square miles of strategic importance between the plains of India and the Tibetan plateau region of China. The core area of the state is around the Paro Valley in the Inner Himalaya zone (Map 3). The history of Bhutan, like its survival as an independent state, tends to be obscure. However, there are strong connections with Tibet. During the last 500 years lamas from Tibet have settled in Bhutan to found monasteries such as that at Punakha (1527 A.D.). These Tibetan immigrants found the country inhabited by a tribe called the Bhutia Tephoo who had originally come from Cooch Behar in India. The Tibetan immigration drove many of the Bhutia Tephoo into the Duars Plain area of Bhutan (Map 2). About 300 years ago the Tibetan lama Shepton La-Pha established himself as the King of Bhutan with the title Dharma Raja and began welding together his dominions into an administrative unit. Later two rulers were established, one, the Dharma Raja, took care of spiritual affairs, whilst the other, the Deb Raja, administered the temporal matters. The Dharma Raja's office was dependent upon a verifiable reincarnation of the former Dharma Raja and the post ceased in the 1930's when no reincarnation was found.

During the Nineteenth Century Bhutan was torn by civil strife. The Den Raja's office was supposed to be filled by election by the governors of the forts and territories, but went to the governor who was strongest. Until the Twentieth Century Bhutan was a political unit without a central

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1. The following references have been important in the writing of the chapter on Bhutan; P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms', Van Nostrand, Princeton 1963; B.N.Datar: 'Himalayan Pilgrimage'; Gov. of India Publications, Delhi 1961; D.Doig: 'Bhutan, the Mountain Kingdom', National Geographic Magazine, Vol.117; 1960; P.P.Karan: 'Bhutan & Sikkim'; Canadian Geographical Journal, Vol.65, Dec. 1962.

authority as local power dominated. In 1907 the governor of Tongsa became the hereditary king or Gyalpo and the present monarch Jigme Dorji Wangchuk is the third. His wife is the English educated cousin of the Maharaja of Sikkim.

Being a weak state Bhutan has been since the Nineteenth Century the scene of British, Chinese, Indian and Tibetan rivalry. Between 1841 and 1864 the British acquired most of the Duars Plain region. Up until 1904 political relations between Britain and Bhutan were through the Government of Bengal, but after this date there was a transfer to the British Political Officer of Sikkim who was resident in Gangtok and who also looked after relations with Tibet. This brought relations with Bhutan, Tibet and Sikkim under the Government of India in Delhi. With the withdrawal of Britain from India in 1947 two years later a new treaty was signed between India and Bhutan to replace the earlier Anglo-Bhutanese one. By this Bhutan agreed to be guided by India in her foreign affairs, and India acknowledged responsibility for Bhutan's defence and communications. The British annual subsidy of 500,000 rupees was increased by India, and in fact all of Bhutan's foreign aid (about £1 $\frac{3}{4}$ million per annum) comes from India. In 1961 Bhutan launched a £12 million Five Year Plan based on aid from New Delhi. India discourages all but commercial arrangements with other states for the Bhutanese. China has frequently offered assistance to Bhutan without success, and the Bhutanese Government's request in 1961 to India for permission to accept American aid under the Public Law 480 funds arrangement led to their being told that anything Bhutan may need India can provide. In her efforts to isolate Bhutan India had some initial problems from Chinese wooing as the Bhutanese have very strong ethnic and cultural connections with Tibet, but the Chinese action in Tibet following the 1959 revolt has done much to re-

establish Indian predominance and alienate any sympathy for the Peking Government. As with Sikkim Bhutan is a satellite of India, and in much the same way survives largely due to the British Raj in the Nineteenth Century using the country as a buffer between British and Chinese interests in the Himalayan region. Britain never incorporated Bhutan within her Indian territories, and this policy has been followed by India since 1947.

In contrast to Sikkim Britain did not conclude a Sino-Bhutanese boundary treaty during the period of the British Raj. The Sino-Bhutanese boundary is neither delimited nor demarcated and it is in dispute (Map 3). Apparently the British saw no urgency to conclude a Sino-Bhutanese boundary agreement with China as they had done in Sikkim, probably because British influence was somewhat later establishing itself in Bhutan and by that time China did not appear the threat it appeared still in 1890 (Sino-Sikkimese boundary agreement).

The boundary with India is not such a problem for the Bhutanese. In 1774 after the Bhutanese had invaded the British protectorate of Cooch Behar in India the British signed a peace treaty whereby each state recognised the boundary in the Bengal Duars as it was before the Bhutanese incursion. Following the Anglo-Burmese War of 1825-26 British rule was extended into Assam and the British confirmed the boundary between Bhutan and their Assamese territories. According to this agreement the British occupied the Durang Duars in Assam between July and November of each year, and the Bhutanese for the other months, paying an annual tribute for the right in kind. The Bhutanese fell into arrears on these payments and indulged in expeditions for plunder into British territory from 1828 to 1839. In 1841 these events led to the British annexation of the Bhutan Duars and

the establishing of the present southern boundary of Bhutan in the Assam. Similar problems over the Bengal Duars led to the 1865 Treaty of Sinchula Pass in which Bhutan assented to the cessation of the Duars to the British for an annual subsidy. The Duars Plain is an area of about 215 miles in length and a little over 20 miles in width.

Bhutan's physical geography divides the state into the three structures of the Great Himalaya, the Inner Himalaya and the Duars Plain. The Great Himalaya offers heights of up to 24,000 feet in northern Bhutan and the state has been strongly influenced by the five passes leading into Tibet from this area. Here pastures are used in summer up to 14,000 feet for cattle, or higher for yaks. Just north of the Great Himalaya are lower mountains separating the former from the Tibetan Plateau and which form the principal watershed for those rivers flowing southwards. Until the Chinese invasion of Tibet the Bhutanese and Tibetans were little aware of any political division, with Bhutanese bringing grain, spices and cloth into Tibet and salt, wool and yak products from Tibet. Since then there has been a rapid change of this state of isolation with the closing of the boundary so that the Bhutanese economy of the border areas has been greatly affected.

Spurs from the Great Himalaya thrust south to form the watersheds between Bhutan's main rivers. The Black Mountains between the Manas and Sankosh Rivers (Map 2) divide Bhutan into two ethnographic parts; to the east the population originally came from the Assam hills whilst those of the west are of Tibetan origin. The mountains affect climate with the windward slopes having a heavy rainfall and those of the lee sides being dry. Similarly vegetation ranges from the dense forest of the damp lower slopes to the alpine growths of the higher ground. The fertile valleys of central

Bhutan amongst the Inner Himalaya are at heights between 5,000 and 9,000 feet, the best known being Paro at 8,000 feet and Punakha at 5,000 feet (Map 3). The river valley sides have been terraced for the growing of rice and wheat. The more important settlements are dominated by a fortified monastery (e.g. Paro).

The Duars Plain extends into Bhutan for about ten miles with the mountains rising sharply in the north. The rainfall is heavy and the climate unhealthy. The dense forest of the northern half gives way to bamboo and savanna in the south. There are eighteen passes from the Duars into the Himalayan foothills. The settlement is in small villages along the foot of the mountains.

Bhutan's population is generally conceded to be less than a million, or about 45 persons per square mile. The lowest density of population is in the Great Himalaya region and the Duars Plain. The scattered nature of the population distribution, plus the fact that it is completely rural makes political unity a dream for the distant future. As mentioned previously there is also the ethnic division between the western Tibetan stock and the eastern tribes related to the peoples of the North East Frontier Agency of India. The Tibetans are strict Buddhists, which cannot be claimed for the eastern part of the state. Also there has been an immigration of Hindus into the foothills of southern Bhutan which adds to the political disunity of the state. The Tibetan version of Buddhism is the state religion and a little over a quarter of the government's total revenue is spent on the upkeep of the 4,000 lamas and 8 monasteries.

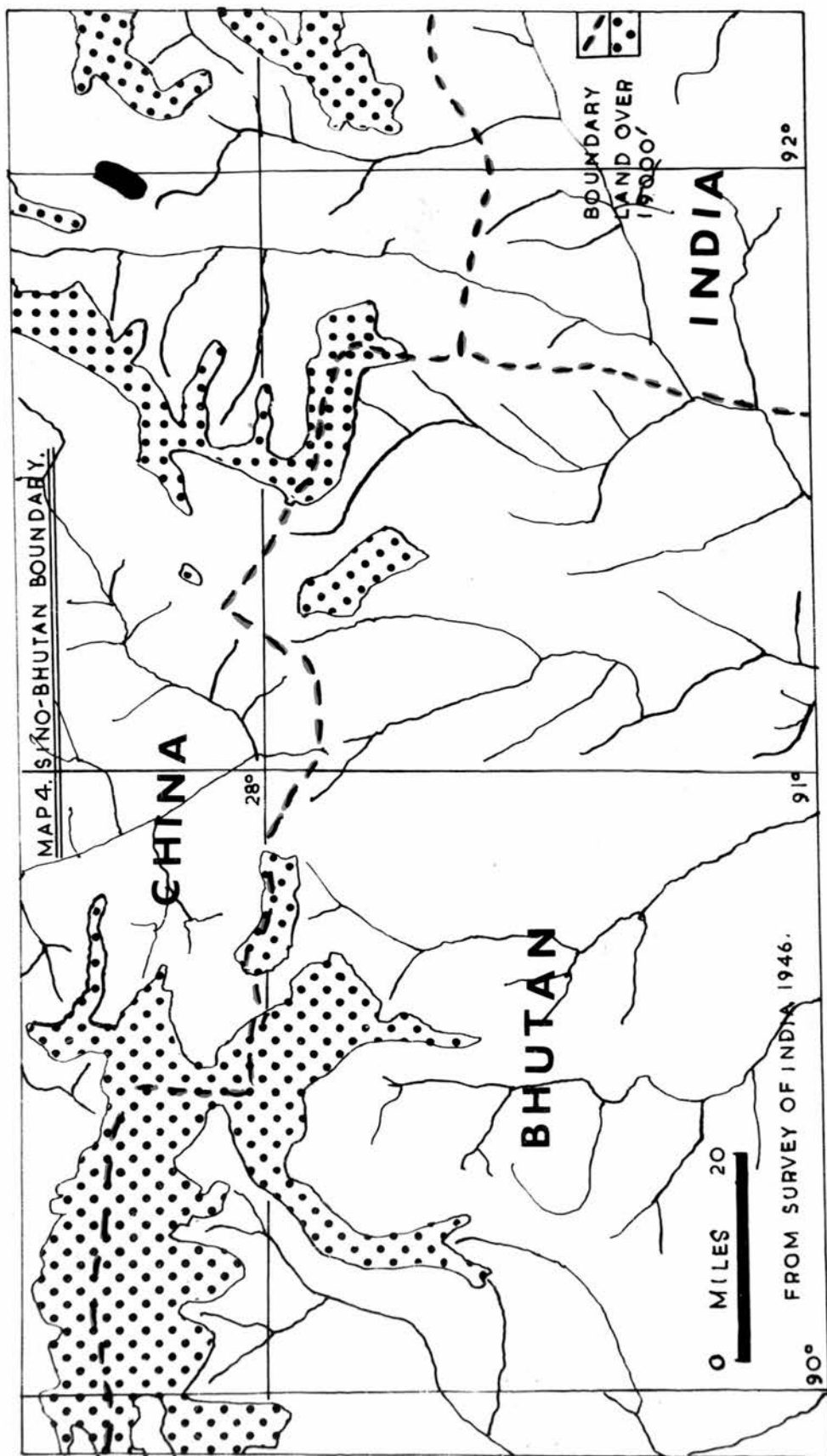
The Hindus of the south make up about 25% of the total population and are mainly from Nepal. They are banned from living in the central areas of Bhutan and suffer from an acute shortage of land suitable for agriculture. In government legislation they are discriminated against, which has

further emphasised their position as a discontented element within the state. The disunity within Bhutan became of pressing importance to the Government after the People's Republic came into being. The Bhutanese were slow to appreciate the Chinese threat, but in 1960 they decided to launch an ambitious road building programme to be completed in 1966. Central Bhutan is being linked with India by three north-south roads which are also being connected together by an east to west highway. The plan calls for 800 miles of new roads assisted by a new law which makes work on the highways compulsory, each family in a district has to provide one labourer with the option of replacing him or her each month by another. India is supplying capital and engineers and in 1962 the first highway between Paro and the Indian boundary (120 miles) at Phuncholing was opened, reducing the travelling time from six days to ten hours (Map 3).

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Of Bhutan Karan writes 'Differences in language, religion, and ethnic origin have their effect on the political life of the tiny kingdom. The people generally think of themselves in terms of their respective tribes or ethnic origin.' This again is a similar situation to that which prevails in other such Minor Neutralist states as Burma, but there are differences with regard to Bhutan for the administration has taken an active part in closing its own side of the boundary with China except for refugees from Tibet. Traders returning from Tibet were found to be carrying propaganda so that in 1959 Bhutan stopped all such movement across the border and recalled the trade representative in Lhasa in 1960. In May of 1960 the National Assembly heard complaints of the government's failure to provide alternative markets for Bhutanese rice and of the poor qual-

2. P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms'; Van Nostrand, Princeton 1963, p.41.



ity of Indian salt, but since the opening of the first road to the south criticism has been less open. India has welcomed the reorientation of Bhutanese trade southwards as the former connections with Tibet were held to be strategically weakening to the sub-continent's defence.

In the boundary dispute between Bhutan and China the Bhutanese claim the so-called 'traditional line' which follows the crest of the Great Himalayan Range (Map 4) which is also the area's watershed along most of the way. Peking lays claim to 300 square miles of north-eastern Bhutan, plus much of the region north of Punakha, the basis of their demands being ethnic similarity. Therefore the Bhutanese boundary version comes within Boggs' Physical category or Hartshorne's 'Subsequent'; the Chinese version into Boggs' 'Anthropo-geographic' subdivision or, again, Hartshorne's 'Subsequent' category. In support of their case the Bhutanese quote the Report of the 1895 Pamir Boundary Commission³ in that 'Geographically, politically, and ethnographically, watersheds are ... the only true and stable boundaries in these regions.'

Bhutan's central government, with the beginnings of a transport system, is only at the first stage of making its administration effective throughout the state area. Bhutan is not a coherent political unit, being culturally diverse and beset with the problem of minority nationalisms. As with both Bhutan and Sikkim the original reason for their existence as separate states was due to Tibetan Lamaism. Each of the states was set up as a vassal area of Lhasa, but both developed independently under ambitious, religiously imbued dynasties. It was strong personalities which led to the setting-up of Bhutan and Sikkim, for there is a general lack of reasons why

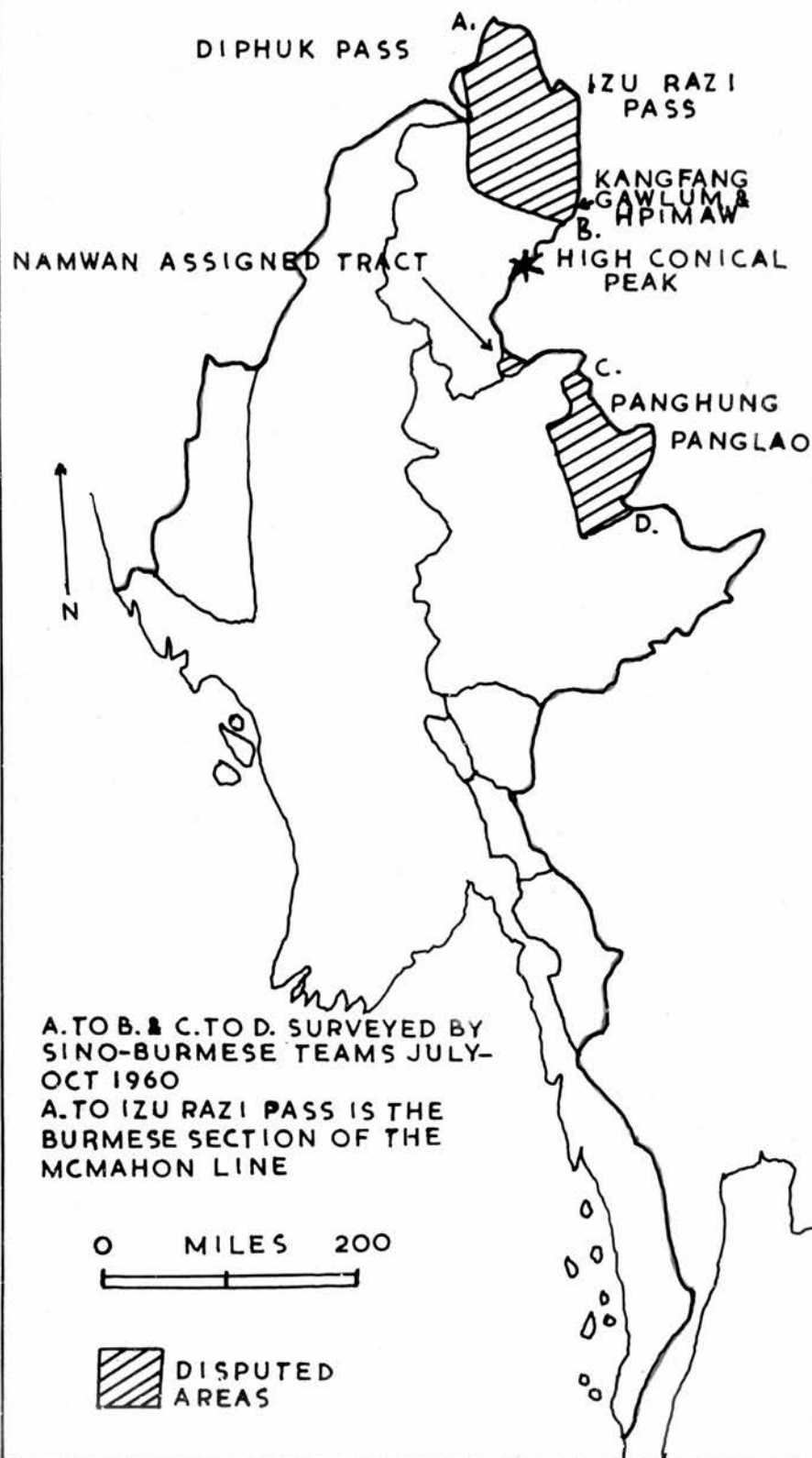
3. Government of India: 'Report on the Proceedings of the Pamir Boundary Commission'; Calcutta 1897, p.7.

the area should not have first been a frontier zone between China and India later absorbed into these states. The survival of Bhutan and Sikkim during the Nineteenth Century was due to a decision to use these countries as a Sino-British buffer zone. Although both Bhutan and Sikkim are now Indian satellites they still serve as buffer states between China and India. Similarly, except for the tradition of separate independence, there seems little reason why the two states should not be combined.

The present extent of Bhutan and Sikkim is largely the outcome of how far the surrounding states would permit the nominal administration of Gangtok and Punakha to spread. The Sino-Bhutanese boundary dispute is a continuation of this territorial battle. Perhaps the most logical move would be the integration of Bhutan and Sikkim into the Indian state area, but this might well be challenged by China and would appear morally difficult to justify in the light of present world opinion regarding nominally independent small states.

The Sino-Bhutanese boundary (Bhutanese version) will become more effective as a division within the landscape when the road building programme permits easy travel from Punakha to the border zone. Already the inhibition of movement of population across the boundary has begun to change the attitudes prevailing amongst the people each side of the line. However, as with all states the effectiveness of the political boundary as a division in the landscape is related to the effectiveness of the political administration within the whole state area and as yet Bhutan is still striving for the latter.

MAP 1. DISPUTED AREAS



The Sino-Burmese Boundary

On January 28th 1960 the People's Republic of China and the Union¹ of Burma concluded a boundary agreement. Having been only familiar with the more aggressive image of Communist China there was a certain amount of surprise throughout the world at Peking's action, although as it was later appreciated this was only the first of a number of similar boundary treaties. As the Sino-Burmese boundary has now been at least successfully delimited, if not demarcated, it is perhaps instructive to² view more closely the historical background of the treaty before dealing with the geography of the boundary area.

In December of 1954 Burma's Premier U Nu paid a visit to China. At that time there were more pressing problems than the disputed areas of Burma's northern border (Map I). At the end of the visit on December 12th a Joint Communique was issued stating that 'in view of the incomplete delimitation of the boundary line between China and Burma the two Premiers held it necessary to settle this question in a friendly spirit at an appropriate time through normal diplomatic channels'. But a year after the publication of this statement the matter was forcefully reopened by a clash between Burmese and Chinese troops at Wakha in the Wa state during November of 1955. According to the Sino-British agreement of 1941 this was Burmese territory, but the Peking Regime did not recognise this treaty as they claimed China was weak from war with Japan at the time and it had been imposed by the British. Also the Chinese stated

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1. A copy of the boundary agreement is in the Appendix.
 2. Much of the historical background in this section is based on D. Woodman: 'The Making of Burma'; Cresset Press, London 1962.
H.Tinker: 'The Union of Burma'; Oxford, London 1957. British Parliamentary Publications Nos. 5164 (1887) and 7547 (1894) and Treaty Series No.48 (1956).

MAP 2. PRESENT POLITICAL BOUNDARIES



that a British Note dated April 10th 1911 acknowledged that Hpimaw, Kangfang and Gawlum were part of China. The Chinese refused to move until the Union troops vacated these areas, plus much of the northern section of the boundary.

The Burmese were not surprised by China's claims to Hpimaw, Kangfang and Gawlum, but were upset by the demand for much of what was Kachin State (Map 2). A Joint Boundary Commission was set up to study the whole question, the Burmese claiming that they governed 'all those territories which had been administered by the British Government, that these territories included Hpimaw, Kangfang, and Gawlum, and that they had at no time advanced into any area which was not already administered by the British as part of Burma at the time of the transfer of power.'³ U Nu had been replaced by U Ba Swe as Prime Minister, but with the latter's approval he accepted an invitation from Chou En-lai to visit Peking. Before he left it was decided that Burma should sue for the recognition of the boundary as the British had left it.

Although China had certain just complaints against the 1941 Treaty she was willing to accept it as part of a general agreement. Peking wanted the abrogation of the Namwan Assigned Tract lease, although special consideration would be made of the Burmese highway through it, plus the return of Hpimaw, Kangfang and Gawlum. U Nu returned to Rangoon with his report and after consultations went once more to Peking. It was hoped at this time that if Burma gave up Hpimaw, Kangfang and Gawlum she might retain the Namwan Tract. The possibility of Hpimaw, Kangfang and Gawlum being administered by the Chinese met opposition from the Kachins. The Chinese were aware of the Kachin feelings in the matter and were prepared to make concessions.

3. Unless otherwise stated the quotations are from a speech delivered by U Nu to the Burmese Chamber of Deputies on April 28th 1960 and reported in 'Burma', Vol.9., No. 4., for October 1960, pp.11-27.

U Nu flew back to Rangoon with Peking's proposals that Hpimaw, Kangfang and Gawlum should be returned to China, but that the boundary should run along the watershed between the N'Mai Kha and the Salween Rivers which was more generous than their previous claims.

China's claims on the Namwan Tract and Hpimaw, Kangfang and Gawlum were honourable ones. The Namwan Tract had been recognised as Chinese territory by the 1894 Anglo-Chinese Convention and the 1897 Anglo-Chinese Agreement; under the latter the British had persuaded the Chinese to rent them the area for a sum of one thousand rupees per annum. Although Burma's only route between her Shan and Kachin States ran through the Namwan Tract she was well aware of China's right to the region and had planned another highway to the west.

The 1894 Convention and 1897 Agreement related only to that part of the Sino-Burmese boundary from the High Conical Peak (Latitude 25 degrees and 35 minutes N.) to the tripartite junction of the Burmese, Chinese and Laotian borders. The 1894 Convention stated in Article IV, 'It is agreed that the settlement and delimitation of that portion of the frontier which lies to the north of latitude 25 degrees and 35 minutes shall be reserved for future understanding between the High Contracting Parties when the features and condition of the country are more accurately known.' Britain felt that the best boundary would be between the Salween and N'Mai Rivers, but China claimed that the boundary should be farther west. After surveying of the region and negotiation in 1905 the British Minister in Peking was instructed to get the Chinese Government to agree to the 'watershed between the Irrawaddy and Salween basins up to the confines of Tibet' as the boundary with an annual payment of not more than 1,500 rupees as compensation. The Peking Government refused and in 1906 the British Minister was instructed

to inform the Chinese that Britain would occupy and recognise this boundary anyway.

In 1910 the Chinese chieftain of Tengkeng raided Hpimaw and Peking refused to take action as they did not recognise the area as British territory. In 1911 a British expeditionary force occupied Hpimaw and negotiations were opened in Peking. A British Note (April 11th 1911) rejected all Chinese claims to villages west of the N'Mai Kha-Salween watershed with the exception of Hpimaw, Kangfang and Gawlum. The Lieutenant-Governor of Burma (Sir Harvey Adamson) considered the Chinese claim to the latter three villages as superior to that of his own Government. Nevertheless on February 1st 1913 Hpimaw, Kangfang and Gawlum were annexed by Britain.

On February 4th 1957 Premier U Ba Swe in a note to Chou En-lai offered China 56 square miles (Hpimaw, Kangfang and Gawlum) and suggested that the Namwan Tract be given to Burma on a permanent basis. When U Nu again became Prime Minister in the same year he discussed U Ba Swe's proposals with Chou En-lai who suggested that the Panghung and Panglao tribal areas might make an acceptable exchange for the Namwan Tract. In July of 1957 an official Chinese note stated that Peking claimed 186 square miles of territory in the Hpimaw-Kangfang-Gawlum area and 86 square miles of the Panghung-Panglao region in return for the Namwan Tract. Justice U Myint was dispatched to Peking to say these terms were unacceptable. Chou En-lai suggested that before the matter was discussed further a joint survey team should carry out a study of the boundary.

In December of 1957 Deputy Premiers U Ba Swe and U Kyaw Nyein arrived for a goodwill visit to Peking where Premier Chou proposed that the Namwan Tract should only be given permanently to the Burmese in return for the Panghung and Panglao tribal areas, although he did modify his views on the

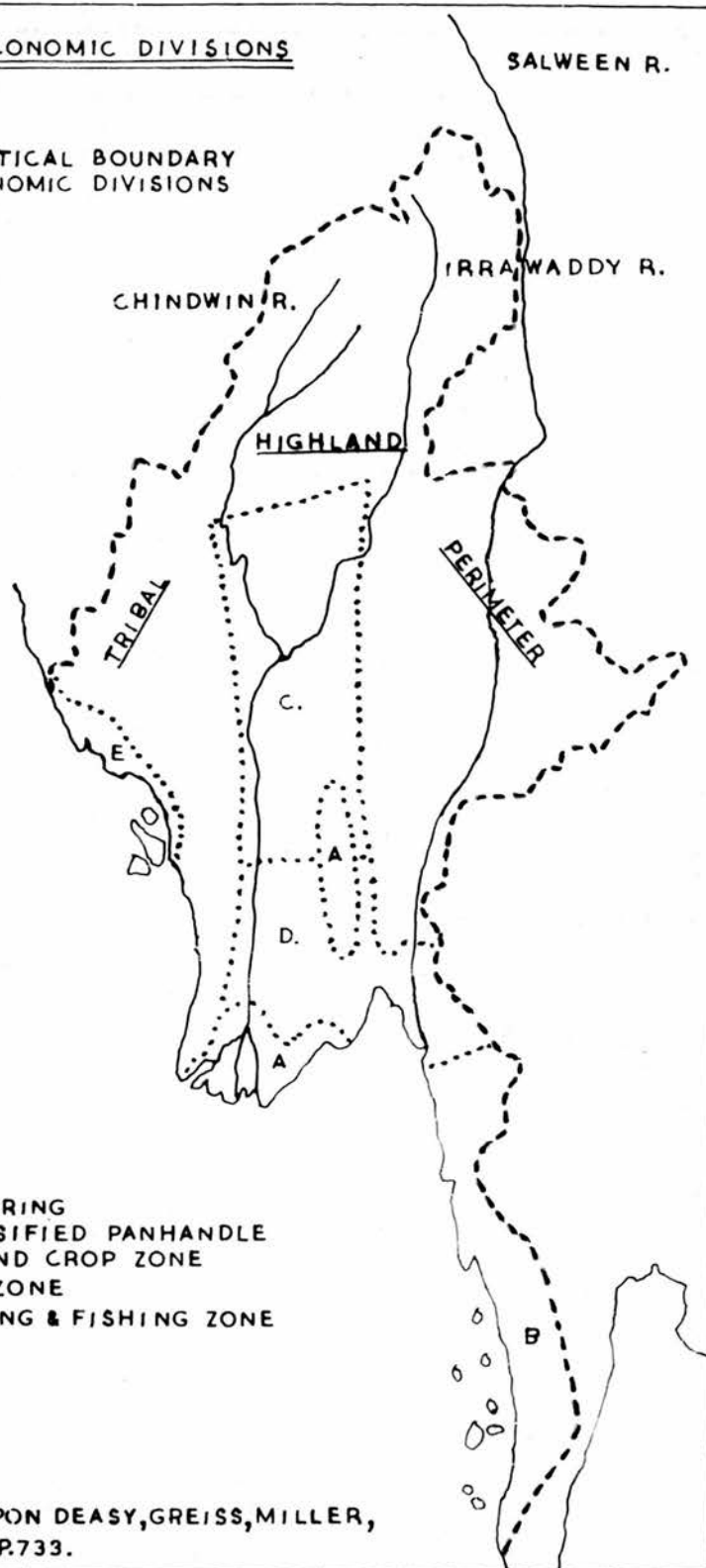
northern boundary to the extent of agreeing that this section should follow, with the exception of the Taron River region, the watershed. Chou En-lai claimed that the Taron River area was important as a source of medicinal herbs for the people to the north of the watershed. Again the Chinese suggested a Boundary Commission to survey 'the Sino-Burmese boundary from Izurazi Pass to the Indian border, and also to settle, step by step, the question of the Hpimaw, Gawlum and Kangfang area to be ceded to China, and also that of exchanging the Namwan Assigned Tract for the Panghung and Panglao tribal areas falling to the west side of the 1941 line.'

There was something of a stagnation until a new administration came to power in Rangoon under General Ne Win who made fresh advances to Peking. He stated that he felt the boundary should follow the watershed, that Hpimaw, Kangfang and Gawlum should be returned to China and that the Namwan Tract should be exchanged for the Panghung-Panglao areas west of the 1941 line. Ne Win managed to persuade the Shan leaders to agree to the transfer of the Panghung and Panglao tribal areas and proposed that of the 86 square miles in this region demanded by Peking 62 square miles should be offered. Ne Win's proposals were sent to the Chinese on June 4th 1959. Ne Win stressed his unique position as a non-party leader in the negotiations which followed which had enabled him to go farther in concessions to the Chinese than any leader of a political party. On December 22nd 1959 Ne Win received a formal invitation to visit Chou En-lai during the following month. On January 23rd 1960 the Burmese delegation arrived in Peking and on January 28th the Agreement was concluded. In the northern areas it was decided the boundary should follow the watershed except where it crossed the Taron River basin. From Izurazi to the High Conical Peak the boundary was also to follow the watershed with the exception of the transfer area of Hpimaw-Kangfang-Gawlum. The Namwan Tract of 80 square miles was to become Burmese territory, although

MAP 3. ECONOMIC DIVISIONS



POLITICAL BOUNDARY
ECONOMIC DIVISIONS



A = LUMBERING
B = DIVERSIFIED PANHANDLE
C = DRYLAND CROP ZONE
D = PAZI ZONE
E = FARMING & FISHING ZONE

BASED UPON DEASY, GREISS, MILLER,
& CASE P.733.

how much of the Panghung-Panglao area was to be exchanged was not settled (similarly with the Hpimaw-Kangfang-Gawlum region). A joint committee was to decide exactly how much Burma should give to China in these two areas. China agreed to acknowledge the 1941 boundary and to surrender her right under that agreement to participate in the mining enterprises in the Lufang region. Thus, after many years of negotiation, the boundary between China and Burma was reasonably well defined.

Although certain physical features such as watersheds were favoured in most of the areas for delineating the Sino-Burmese boundary the political decision has not had any particular effect upon the region's geography as in the main it is a wild and inaccessible type of country which is involved. Burma itself is 'a land of longitudinal mountains and valleys.'⁴ In the west there are the Naga-Chin-Arakan Yoma ranges rising in the northern areas up to 20,000 feet. In the east is the Shan Plateau averaging about 3,000 feet in elevation and dropping to the Central Plain in a scarp. The Salween River (Map 3) drains the Shan Plateau. The Central Plain of the Irrawaddy and Sittang Rivers is broken by the Pegu Hills in the south and the Kachin Hills to the north. In the southern part of Burma are the hills of the Tenasserim. The physical geography of Burma has helped to isolate her from China and India. Unlike Afghanistan Burma was never an historical crossroads or transit area. Between the core areas of China and Burma there is the mountainous country of Yunnan. Within Burma itself the hilly and jungle covered nature of the north, east and west has emphasised the cultural differences of the various areas of the state.

The 1956 Census listed 126 languages and dialects within the Union of

4. L. Carlson: 'Geography and World Politics'; Prentice-Hall, New Jersey 1958; p.495.

Burma, which could be classified into II principal language groups. Of the 20 million people inhabiting Burma roughly 65% claimed Burmese as their mother tongue. There are five dominant ethnic groups, plus the immigrant Chinese and Indian communities. The Burmans are Mongolian in physical characteristics and are culturally allied to the Thais. It is thought that they entered the Indochinese Peninsula about 900 A.D. They are in the main Buddhist. The Karens are the largest minority group and make up about 15% of the total population. Until the coming of the British in the Nineteenth Century they were an exploited minority and are hostile to the more numerous Burmans. They are found in the south-eastern areas of the Union and are peasant farmers. They differ in language from the Burmans and are mainly Baptist Christians. From 1948 to 1956 the Karens waged a war of independence against the Union until their manpower resources were exhausted. It seems unlikely that the state will absorb the Karens successfully for many years.

Other dissident minorities within the Union of Burma include the Chins, Kachins, Shans, and the Nagas on the Indo-Burmese boundary. One of the advantages the Burman majority has over these other cultural groups is that of a higher general standard of education. Only the Karens come anywhere near to challenging the Burman dominance in this field. The cultural contrast between many of these ethnic areas (Map 2) is well brought out by studying the economic divisions within the state. In the south is the booming Padi Zone of Burma (Map 3). Burma is one of the rareities of Asia, namely a food exporting state. Most of the Padi Zone is within the Burman ethnic area, although the Karens have developed part of it in the east. The silts of the deltas and lower valleys of the Irrawaddy and Sittang Rivers provide excellent soils which are watered by the summer monsoon. The

population density is high by Burmese standards, but not by Asian. This is the main source of Burma's rice export. The Dryland Crop Zone further north is still inhabited mainly by Burmans. This was the early economic centre of the Burma area where the middle Irrawaddy and the Chindwin Rivers formed what was called the 'Mandalay Basin'. Irrigation was needed to supplement the limited rainfall. Millet, sesamum, cotton and peanuts replace rice in importance and goats are herded on the brush. The main lumbering zones of Burma are located just south and north of the main rice region. At moderate heights above sea level these areas receive a rainfall intermediate between the wet monsoon of the Padi Zone and the limited fall of the Dryland Zone. The trees are mainly tropical deciduous such as teak and have the advantage of being accessible to those areas where the demand is highest, and to the exporting port of Rangoon. Again, the two zones are mainly within the Burman ethnic belt. The Fishing and Farming Belt has rice growing in the pockets of lowland and valley areas supplemented by fishing encouraged by the numerous small harbours along the coast. There has been a large immigration of people from what is now East Pakistan and the region is densely populated by Burmese standards. The Arakan Mountains isolate this part of the coast from the core area of Burma to the east. What Deasy terms the Divers-⁵ified Panhandle is found in Burma's Tenasserim area. The small coastal plains support padi rice, but in the main the region is too hilly for this type of farming. The better drained slopes are used for rubber plantations. The hills of the interior are the domain of primitive negroid people who practice shifting cultivation and food gathering. There is some fishing and pearling, and the teak forests of the northern part have a limited im-

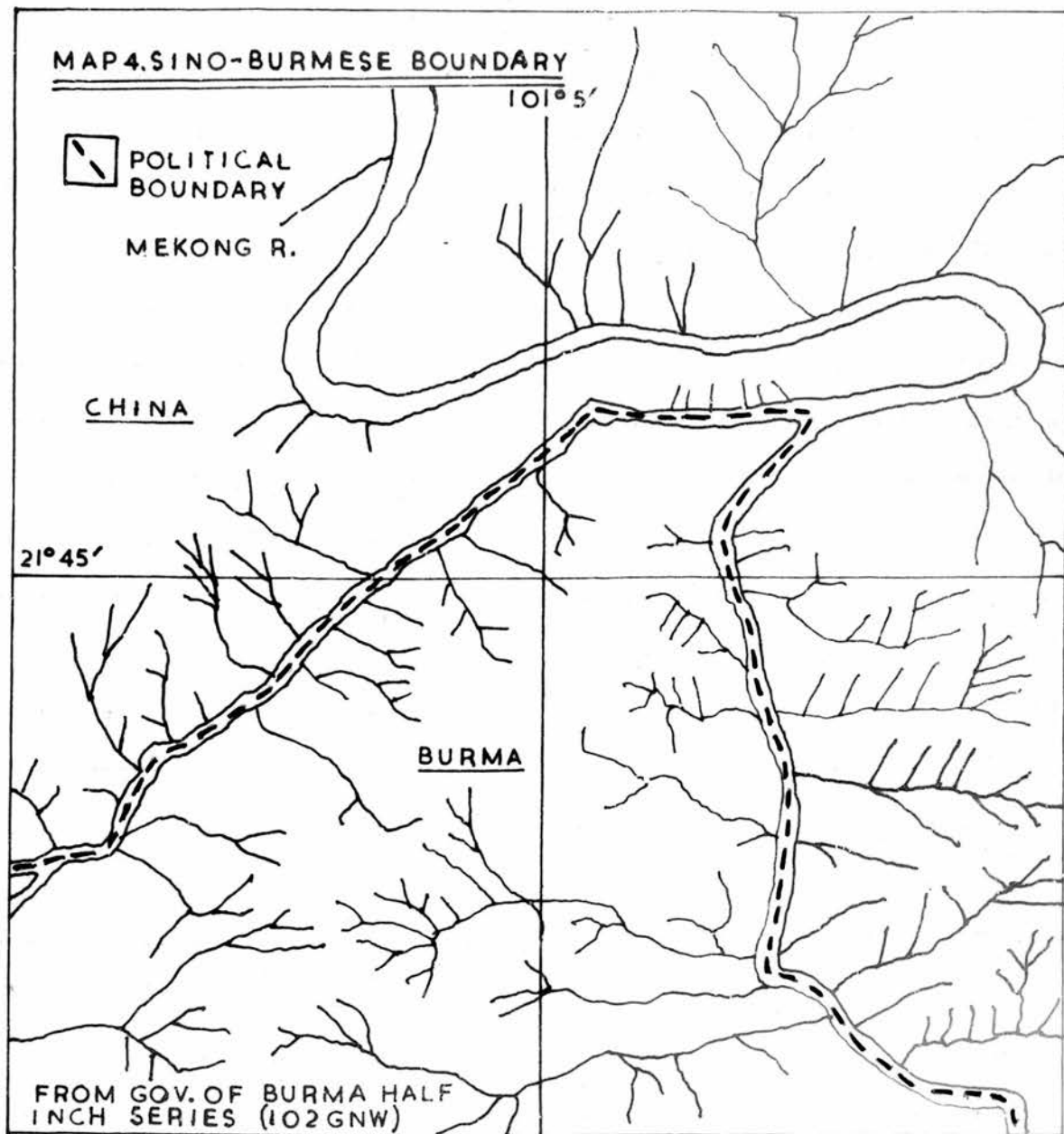
5. G.F.Deasy, P.R.Greiss, E.W.Miller & E.C.Case: 'The World's Nations, An Economic and Regional Geography'; Lippincott, Chicago 1958; p.737.

portance.

Of greater significance to the political geographer interested in boundaries is the geography of the highland perimeter of Burma which encircles the lowlands of the state core area. The terrain is difficult, being mainly mountain and forest. Communications are almost non-existent⁶ and the climate, with a heavy summer rainfall, unpleasant. The economy of these outer lands is that of many similar areas of the world where primitive tribal cultures combat with limited success the jungle environment. Forest is cleared by burning, after which a field is farmed until its fertility is exhausted when a new patch will be used. There is some mining and lumbering. These shifting cultivation areas of the Shans, Kachins, Chins and lesser tribes include the boundary zones. Although the Kachins might be consulted before China was awarded Hpimaw, Kangfang and Gawlum it seems unlikely that the tribes in the region of the Sino-Burmese boundary are aware as to whether they are under Chinese or Burmese jurisdiction. Individual loyalties are to the tribe, not to the state, and the Kachins are found on both sides of the boundary, as are the Shans and numerous other tribal groups. The Mongol peoples of the boundary may be represented in certain government bodies within both China and Burma, but the majority of the families in these sparsely inhabited areas are blissfully oblivious of being part of the Union of Burma since 1948 or the People's Republic of China since 1949.

Burma is very much a Union of a number of nations. Opposition within Burma to the state is strong amongst the minority groups. The Karens, being in the main of more advanced culture than the Shans, Kachins and Chins, have

6. Of particular interest with regard to the shifting cultivation economy of Burma has been; G.E. Harvey: 'The Wa People of the Burma-Chinese Border'; St. Antony College Papers No. 2; Chatto & Windus, London 1957.

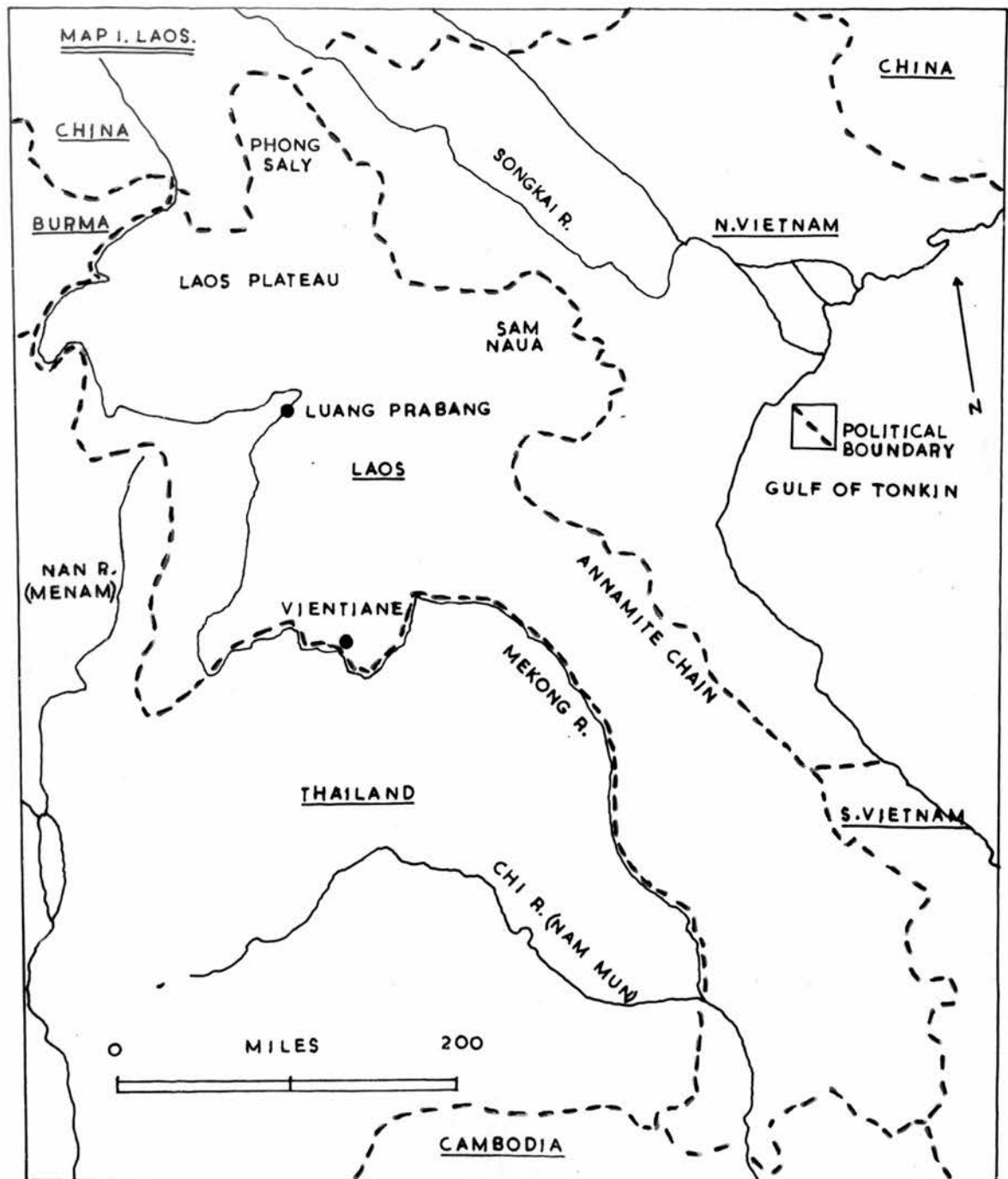


been most effective in their protest against their nationality being submerged, but their defeat is only a beginning to Rangoon's efforts to weld the Union into an entity. Burma lacks both the power and the unity to make her boundary with China an effective geographical divide.

Yunnan is a province of China, but one which is as yet tied none too securely to the Communist state. Peking is better equipped to make the Sino-Burmese boundary function as a division, but does not appear to be particularly interested in wasting manpower and resources in doing so. There is a limit to how much Chinese effort is going to be expended upon making boundaries watertight and one suspects that Peking is satisfied to allow the boundary with a friendly power like Burma to act as a frontier zone rather than the strict line it is on paper. Until the more crucial border areas with India or the Soviet Union are settled it would seem likely that the tribes will be permitted to practice shifting cultivation on either side of the boundary between the Union and the People's Republic.

In conclusion it is interesting to look at a short, but typical section of the Sino-Burmese boundary as illustrated in Map 4. Throughout the entire boundary the Chinese and Burmese have favoured what Boggs has termed a 'Physical' delimitation, using physical features along which to run the boundary line. The two types of physical features favoured are watersheds and rivers. In Map 4 it is the centre line of rivers which is used. There is no particular advantage in determining a boundary line along such physical features in the landscape. What is significant regarding the Sino-Burmese boundary is not that the line can be categorised under Boggs' 'Physical' type or Hartshorne's 'Subsequent', but that both Rangoon's and Peking's political influence in these border areas is limited and that the line has not affected in any way the geographical distributions of the zone. The border areas are inhabited by primitive tribesmen of low culture who have never

heard of Peking or Rangoon, and would be surprised to find that the political boundary existed in their tribal homeland.



The Sino-Laos Boundary

Laos is an isolated country performing something which is similar in function to the late Nineteenth Century concept of a 'buffer state'. It has hardly been touched by modernisation, 'even today there are less than 1,000 miles of motorable road (motorable, that is, during the dry season) in an area nearly twice the size of England, no major industries, and a total electric power production (all thermal) of only 8 million kWh a year'¹. The population may be anything from 1,500,000 to 4 million. Rice production is about 600,000 tons,² per annum, and there is a rice import to supplement it. Some tin is exported from the Nam Patene mines of the middle Mekong area of Laos, and also there are exports of coffee, tobacco, timber, stick-lac and benzoin. However, the Laotian economy is at present functioning on foreign aid, mainly from the United States, but also from France. The state is both politically and economically unstable, and to understand why one must have some knowledge of its recent history which in itself has been greatly influenced by its geographical position.

The French endeavoured to weld what is now the four states of Laos, Cambodia and the two Vietnams into the single unit of Indochina during their period of ruling, despite there having been no tradition of unity before. The Indochinese peninsula can be roughly divided into three physical regions, namely the eastern coastal plains (including the Mekong Delta), the alluvial lowlands of the western area and the central uplands which extend in a tongue-like fashion from the Yunnan plateau of China (Map I). Dominated to a large extent by the physical geography Cambodia and Laos tended to be under the

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1. C.A.Fisher: 'South-east Asia'; Methuen, London 1964, p.570.
 2. As with so much of the statistical material used in this Asian study the source is primarily from such United Nations publications as the Demographic Yearbook, Statistical Yearbook and the Yearbook of International Trade Statistics.

cultural influence of India, whilst the Vietnams owed much to China.

France had sent Roman Catholic missionaries to Indochina as early as the Seventeenth Century, but it was after 1850 that French activity in Southeast Asia became effective. France was interested in finding a route-way into the heart of China for trading purposes, and in ensuring French power in the Far East. Between 1893 and 1904 Laos was made a protectorate, although this status appears to have meant exactly the same as 'colony'. The ruling house was not affected in Luang Prabang other than in the amount of power it wielded. French colonies were considered as extensions of France and policy rested on a belief in assimilation. France aimed at being a modern Rome, a heady ambition in an area as remote from Paris as was Laos. Governor-General Doumer in 1898 planned to connect Laos by rail with the eastern coast of Indochina, but nothing ever came of the project and so the landlocked 'protectorate' continued to rely upon the use of the Mekong for most of its trading. Laos stagnated, although French protection from the more vigorous Annamites was appreciated. In contrast to the Annamites the peoples of Laos prior to World War II supported no nationalist movement clamouring for freedom from French rule. The more accessible Vietnamese resented the French idea of assimilation, whilst the more amenable Laotians were inaccessible because of the physical geography of Indochina.

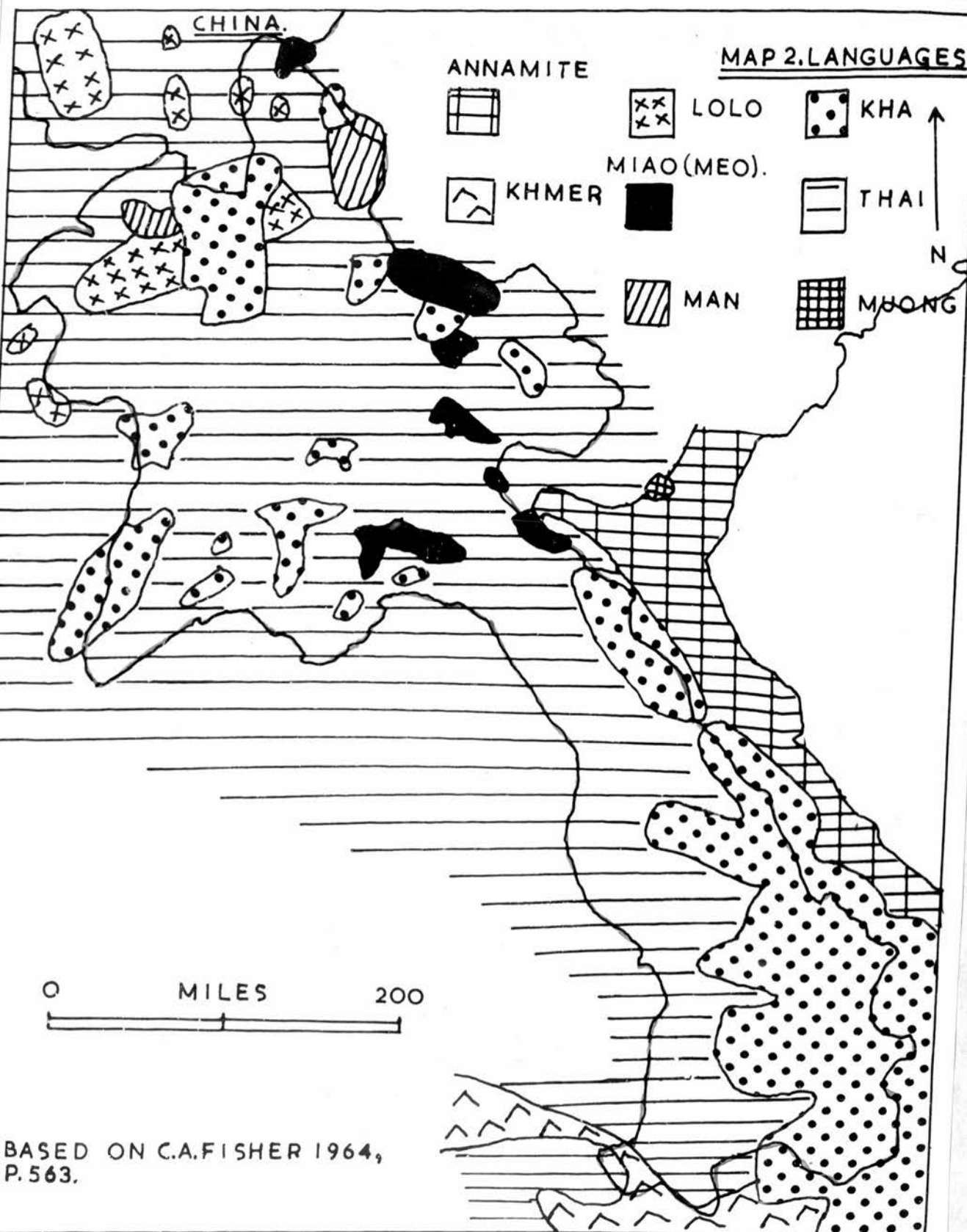
During the latter part of 1940 the Japanese arrived in Indochina (Tonkin) and in 1941 instituted an 'occupation of a friendly territory'. When the war turned against them the Japanese in March of 1945 created the three states of Vietnam (Tonkin, Annam and Cochin China), Cambodia and Laos. This was the beginning of the collapse of France's Union of Indochina. The Allied decision that Chinese troops should be responsible for Japanese surrender north of the 16th parallel and British for that south of the 16th

parallel further emphasised the rift, to become crucial later, between North and South Vietnam. Ho Chi Minh and the Vietminh Coalition used the chances provided to establish a government in Tonkin to which the Annamite Emperor Bao Dai adhered. In the south French officials came with the British troops in September 1945, therefore establishing more effectively French rule.

The French were willing to compromise and in March of 1946 signed an agreement with Ho Chi Minh recognising the Democratic Republic of Vietnam within the Federation of Indochina which was to be part of the French Union. Misunderstandings such as the degree of independence involved led to war in December of 1946. Once the regime of Mao Tse-tung was established in Peking Ho Chi-Minh was able to cast off his non-Communist supporters and the French to claim their struggle was not a colonialist one, but war against world Communism. To give the old Indochinese Union a new flavour in the face of the threat from the north the French in December of 1950 tried to weld the three states of Laos, Cambodia and Vietnam into a Customs and Communications Union. This seemed to antagonise popular opinion in Laos. By the beginning of 1954 France was obviously losing the military conflict as well and negotiations were begun which led to the Geneva Agreements of 21st July 1954.

According to these agreements Vietnam was to be temporarily divided along the 17th parallel for a year until elections were held throughout the country. All four Indochinese states were barred from military alliances or the having of foreign bases on their territory. All foreign troops were to be withdrawn and in Laos the Pathet Lao (Communist) forces had to regroup in the two northerly provinces of Sam Neua and Phong Saly (Map I). The United States was unwilling to support the Geneva Agreements and set about organising the South East Asia Treaty Organisation to stabilise the

MAP 2. LANGUAGES



BASED ON C.A. FISHER 1964,
P. 563.

area. The Treaty was signed at Manila on September 8th 1954 by the United States, the United Kingdom, Australia, France, New Zealand, Pakistan, the Philippines and Thailand.

In many ways Laos represents a revolutionist's ideal. As in Burma there was always a certain amount of contempt felt by the valley dwellers for the hill tribes, but in contrast to Burma half or more of the population of Laos is made up of the hill people. The valley favouring Lao (Map 2) are a branch of the Thai family. Before the arrival of the French in the latter part of the Nineteenth Century the Laotian area was usually divided up into a number of diminutive kingdoms. Only the kingdom of Luang Prabang retained any similarity to its former self under the French, whilst its rival Lan Chang capital of Vientiane became the residence of the French administration in Laos.

Although the Pathet Lao was something of a successor to the former independence party it was increasingly dominated by the Communist elements and worked closely with the Vietminh. Many Vietnamese and hill tribesmen were recruited by the Communists in Laos. The Communists have always exploited most successfully minority or underdog resentment and the hill tribes of Laos were favourably disposed. However, in November of 1957 the Pathet Lao agreed to the return of their provinces of Sam Neua and Phong Saly to Laos on condition that their party should be legalised within the state. Calling themselves the New Lao Hakset party the Pathet Lao in the elections of May 1958 gained between a third and a half of the seats in the National Assembly. The Government split to be replaced by an anti-Communist regime. But in 1960 there was a neutralist coup led by Captain Kong Lee. After much political intrigue a right-wing government under

Prince Boun Oum was established with the support of the United States and Thailand. The neutralists were backed by the Pathet Lao and world Communism. Hostilities broke out until in June of 1962 the two factions were brought into coalition under the neutralist Prince Souvanna Phouma. In July of 1962 at Geneva fourteen states, including China and the United States, agreed to respect Laotian neutrality. However this has not apparently halted Pathet Lao-Vietminh penetration into Laos, as events since 1964 have shown.

The northern areas of Laos are largely in Communist hands and so the Sino-Laotian boundary might have been placed in the Communist category rather than the Minor Neutralist. The ineffectiveness of the political boundary is further emphasised by the diversity of cultures within Laos. The Lao or Thais are spread over much of Southeast Asia and originally came from the Yunnan Plateau, their migration covering centuries. The Pan Thai movement can expect to find support from Thais in the Yunnan Province of China, the Shans of Burma, the Thais of Thailand, besides the Lao of Laos. At present the boundary between the Thais of Yunnan and the Thais of Laos is weak as it is not particularly in the Chinese interest to impose political divisions. The Thais are Mongoloid, short, of yellow skin colour and almond eyes which makes them indistinguishable from most of the other ethnic groups throughout Southeast Asia. There is a certain amount of cultural division between the majority of the Thais who inhabit the valleys, and those poorer brethren who are found in the hill areas.

The Kha hill peoples differ from the Thais who are racially dominantly Pareceans (brachycephalic, flat faced, straight haired and yellow in skin colour) in that they demonstrate certain Nesiot characteristics (dolichocephalic, with a Caucasoid element). As with all efforts at racial classifi-

cation the dangers tend to outweigh the usefulness and the mixture of types within Southeast Asia has been vigorous. 'Kha' is the Laotian name for 'savage'. The Kha culture is limited, based on the shifting cultivation of dry rice and maize. They are animists who live in communal long-houses. Like so many primitive peoples (for distribution see Map 2) they are unaware of the significance of political boundaries or the concept of loyalty to the state. The only understandable loyalty is that given to the tribe. There may be a million Khas in Southeast Asia.

The Miao hill tribes are perhaps a little more advanced in culture than the Khas, but also rely heavily upon shifting cultivation for their crops of rice, maize, roots, sugar-cane, beans and opium poppies. The hills they farm are suffering from erosion in many areas. Again, the only loyalty is to the tribe with the political boundary between China and Laos having no significance.

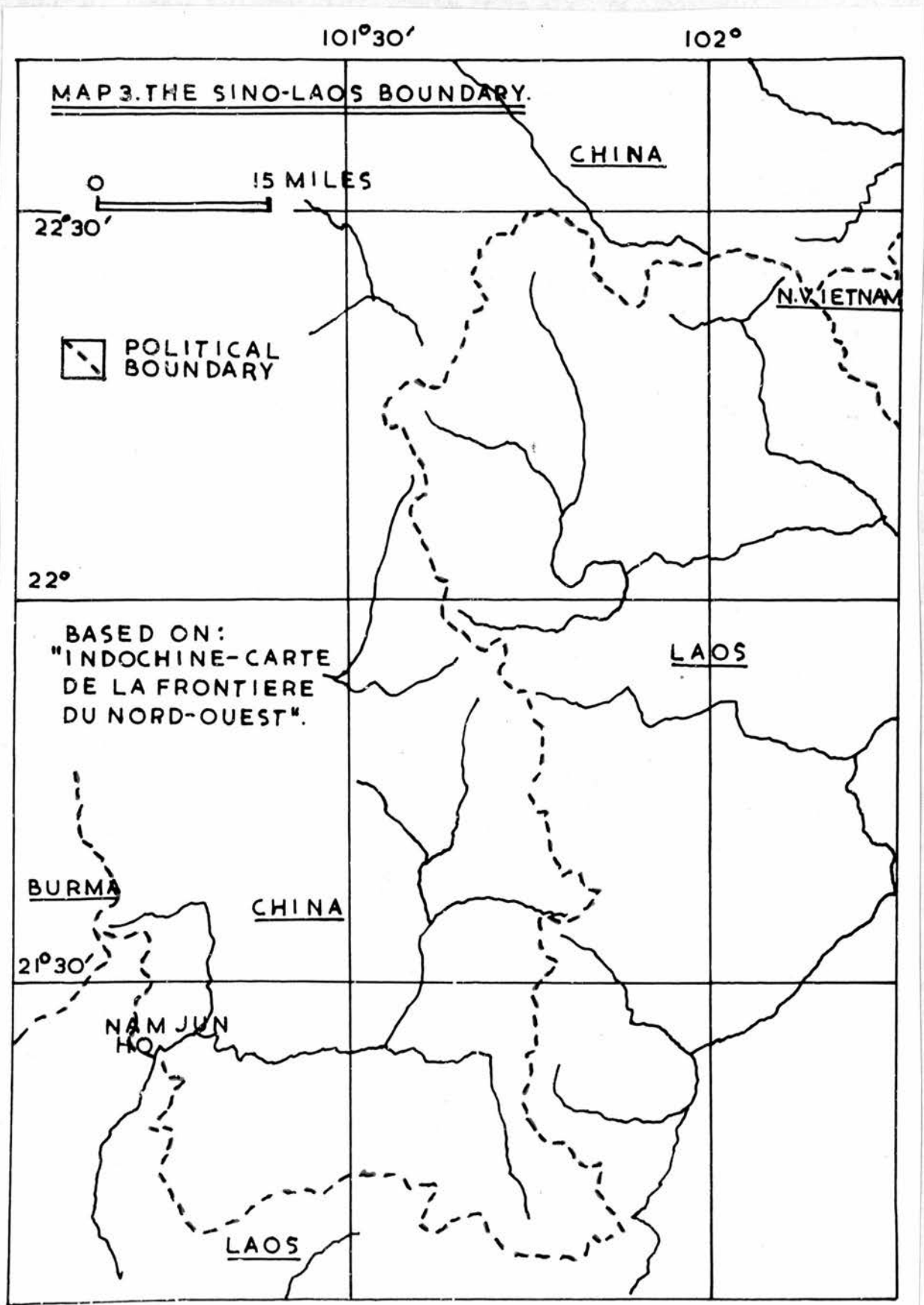
The Lolo tribes live on the higher ground above 3,000 feet. Like the Miao they are predominantly Mongoloid and practise shifting cultivation. Their culture is dominated by the significance of the tribe in all activities, as is the case with all the hill peoples of the Indochinese peninsula. Even the Muong of the lower areas bordering the Annamite districts have been unaffected by such modern ideas as that of the state.

Although the primary interest is in the Sino-Laos boundary it is perhaps worthwhile to mention briefly the Annamite population of the Laos-Vietnam border and the Khmers of the Laos-Cambodia boundary. The Annamites are dealt with in greater detail later, but it is interesting to note that due largely to their closeness to the Kwangtung province in China they were

strongly influenced by Chinese culture and that from III B.C. to 939 A.D. many were part of the Chinese Empire. Like the Annamites the Khmers are Mongolian in their physical characteristics (Pareocean), but in contrast owe much of their cultural tradition to India. The Khmers had once dominated much of Southeast Asia, most notably after the founding of the Angkor Dynasty by Jayavarman II in 802 A.D. By the beginning of the Tenth Century A.D. the population of the Angkor region probably exceeded a million persons.³ The peak of Khmer power was under Suryavarman II (1113-1150 A.D.) when Sung China was too weak to challenge, for the Khmer and Chinese territories met in Angkor's northerly domains. The movement of the Thais into Indochina challenged Khmer supremacy, and their aggressiveness towards Cambodia was encouraged by the Mongols who had gained power in China in 1280 A.D. In 1431 a Thai army captured Angkor and the era of Khmer greatness ended. The Khmers who survive today are, like the contemporary Mayas of Central America, a sad reflection of a former civilisation. The modern Khmers are peasant farmers, in some areas practising shifting cultivation, adhering to the Theravada Buddhist faith.

There is little cohesion in the Laos state. The hill peoples of the Laos Plateau in the north or the Annamite Mountain Chain in the east look only to the tribe and the problems presented by geographical isolation and a low level of culture make the possibility of their adhering to a state-idea remote. The more sophisticated Lao are more likely to support the central government, although here close relations with the Thai of China, Thailand, Burma and North Vietnam inhibit loyalty to the state. In much the same way the Khmer minority in the south feel greater sympathy for Cambodia than for the culturally alien

3. Groslier (B.) & Arthaud (J.): 'Angkor Art & Civilisation'; London 1957; p.25.



Laos. The diversity of cultures, perhaps most emphasised by language differences, has led to a hostile disunity which has been effectively exploited by the Communists so that by 1965 over two fifths of the state was under Pathet Lao control. A Kha hill tribesman is not likely to have much sympathy with the somewhat arrogant Thai of the Middle Mekong Valley. In much the same way the boundary concept is not one which comes easily to people who only recognise tribal and cultural differences and not state distinctions.

With regard to the boundary line itself which runs for a little under 264 miles there are three important agreements between the French and China. At the Treaty of Tientsin signed between the two countries on June 9th 1885 commissioners were appointed by China and France to determine the boundary. On June 26th 1887 a Convention was signed between China and France which delimited the Sino-Vietnamese boundary, but not the Sino-Laos line. This latter boundary was delimited in an agreement signed on June 20th 1895. The Sino-Laos boundary has been demarcated after a fashion by fifteen stone pillars over its total distance (i.e. one pillar every 17.6 miles).

In delimitation the Sino-French team favoured what Boggs terms a 'Physical' line or Hartshorne refers to as a 'Subsequent' type, '... with the single exception of the crossing of the Nan-jun Ho, the entire boundary is delimited by major and minor watersheds.'⁴ Map 3 demonstrates the fact clearly. There is no boundary disagreement between Laos and China although

4. U.S.State Department International Boundary Studies No. 34:
'The China-Laos Boundary'; Washington, June 1964, p.4.

the border area is not in the hands of the central administration in Laos. As with Afghanistan and Burma China does not appear at present to be particularly interested in making the political boundary effective within the border area. China's attitude to what are some of her weakest neighbours, and often with some valid territorial claims, is surprisingly tolerant. The tribal distributions along the Sino-Laos boundary might equally be claimed by either China or Laos. The boundary line has no effect whatsoever on the landscape despite the gesture of fifteen stone pillars. The hill peoples have a loyalty only to the tribe and the central government of Laos' administration is ineffectual within the border area. As a state Laos has no cohesion either culturally or politically.

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5. This section owes much to the following texts: R.Dumont: 'Types of Rural Economy'; London 1957; P.Gorou: 'L'Utilisation du Sol en Indochine française', Hartmann, Paris 1940; Far Eastern Quarterly Special Number on French Indochina, August 1957; F. le Bar & A.Suddard (Editors): 'Laos', Human Relations Area Files, New Haven 1960; C.Robequain: 'L'Indochine française', University of Paris Press 1935; United Nations Dept. of Economic Affairs at Bangkok, quarterly 'Economic Bulletin for Asia and the Far East'.



The Major Neutralist Borderlands

1

The Sino-North-west Indian Boundary

(Due to the Indo-Pakistani conflict in Kashmir it should be appreciated that there is a close relationship between the following and the Sino-Pakistani Boundary).

The region of Kashmir and the Western Himalaya is the centre of a Sino-Indian and Indo-Pakistani conflict. In the area itself the plains of India and Pakistan (Map I) at about 1,000 feet give way to the Siwalik ridges (3,000 feet) which have alluvial valleys between them and adjacent to them. North from the Siwaliks there is the outer complex of the Himalayas with heights up to 15,000 feet and in a belt of about 60 miles in width. The one extensive area of level ground in this mountain chain is the lacustrine basin of Kashmir between the Pir Panjal range of the outer Himalayas and the Great Himalaya range to the north. The Vale is at about 5,000 feet in elevation. The Great Himalaya is 20 miles in width and has peaks up to 25,000 feet. About a hundred miles to the north of the Great Himalayas is the Karakoram range with some peaks of 28,000 feet. Between the Great Himalayas and the Karakoram mountains lie the lower Ladakh and Zaskar ranges. All the ranges except the Karakoram are cut by river gorges, the most notable being those of the Sutlej and Indus. Along the upper

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1. The following have been important in writing this section: O.K.H. Spate: 'India & Pakistan'; Methuen, London 1957; W.Kirk: 'The Sino-Indian Frontier Dispute', Scot. Geographical Magazine Vol.76, No. 1, 1960; & 'The Inner Asian Frontier of India', I.B.G. Transactions & Papers No. 31, 1962; the numerous Indian & Chinese Gov. Publications listed in the bibliography; & Burrard, Hayden & Heron: 'A Sketch of the Geography and Geology of the Himalaya Mts. and Tibet', Gov. of India, Delhi 1933.

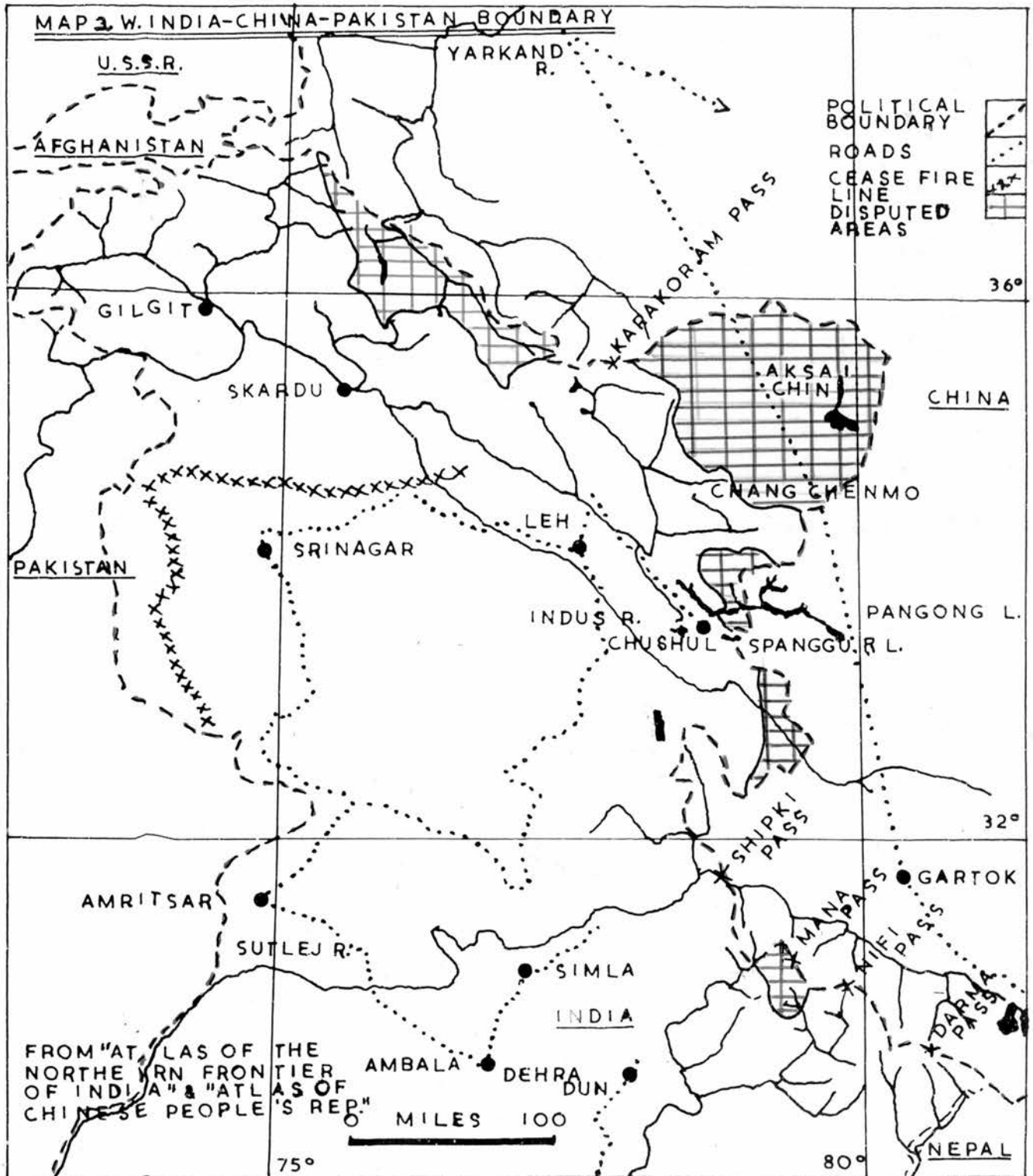
Indus and its tributaries between the Great Himalaya and Karakoram at 10,000 feet alluvial and lacustrine valley floors and terraces have local agricultural significance.

As might be expected the climate is dominated by local contrasts in relief. In winter the average loss of temperature up to 12,000 feet is 3 degrees F. per 1,000 feet, and $2\frac{1}{2}$ degrees in summer. The sequence ranges from humid subtropical in the outer Himalayan ranges below 8,000 feet, to humid microthermal between 8,000 and 12,000 feet, and from 12,000 feet to the snow line (at about 16,000 feet in the Great Himalayas) tundra. The south facing slopes have an annual rainfall between 40 and 80 inches, the main source of precipitation being the summer monsoon which comes up the Gangetic Plains. However, in the Vale of Kashmir over half the 26 inches Srinagar receives comes between November and May from western cyclonic depressions, the maximum being in March and April. Little rain comes to the sheltered valleys beyond the Great Himalayas; Leh receives 3 inches per year.

The effect of altitude and the rain shadow is reflected in the vegetation with the outer ranges having subtropical evergreens and deciduous forest up to 3,000 feet, followed by temperate forest between 3,000 and 8,000 feet (pine, cedar and evergreen oak). Between 5,000 and 11,000 feet there may be moist temperate forests of spruce, fir and rhododendrons. Oaks, rhododendrons, juniper and birch can extent up to the timber line, although in stunted forms. Above the forest there are grasses. Above 16,000 feet temperatures tend to remain below freezing throughout the year. Glaciers can descend as low as 13,000 feet. Beyond the Great Himalayas the valleys have xerophytic shrubs and poor grasses due to the limited rainfall.

The Siwaliks and gravel fans of the outer Himalayan foothills are poorly populated, but the outer valleys may have densities of 300 persons per square

MAP 3. W. INDIA-CHINA-PAKISTAN BOUNDARY



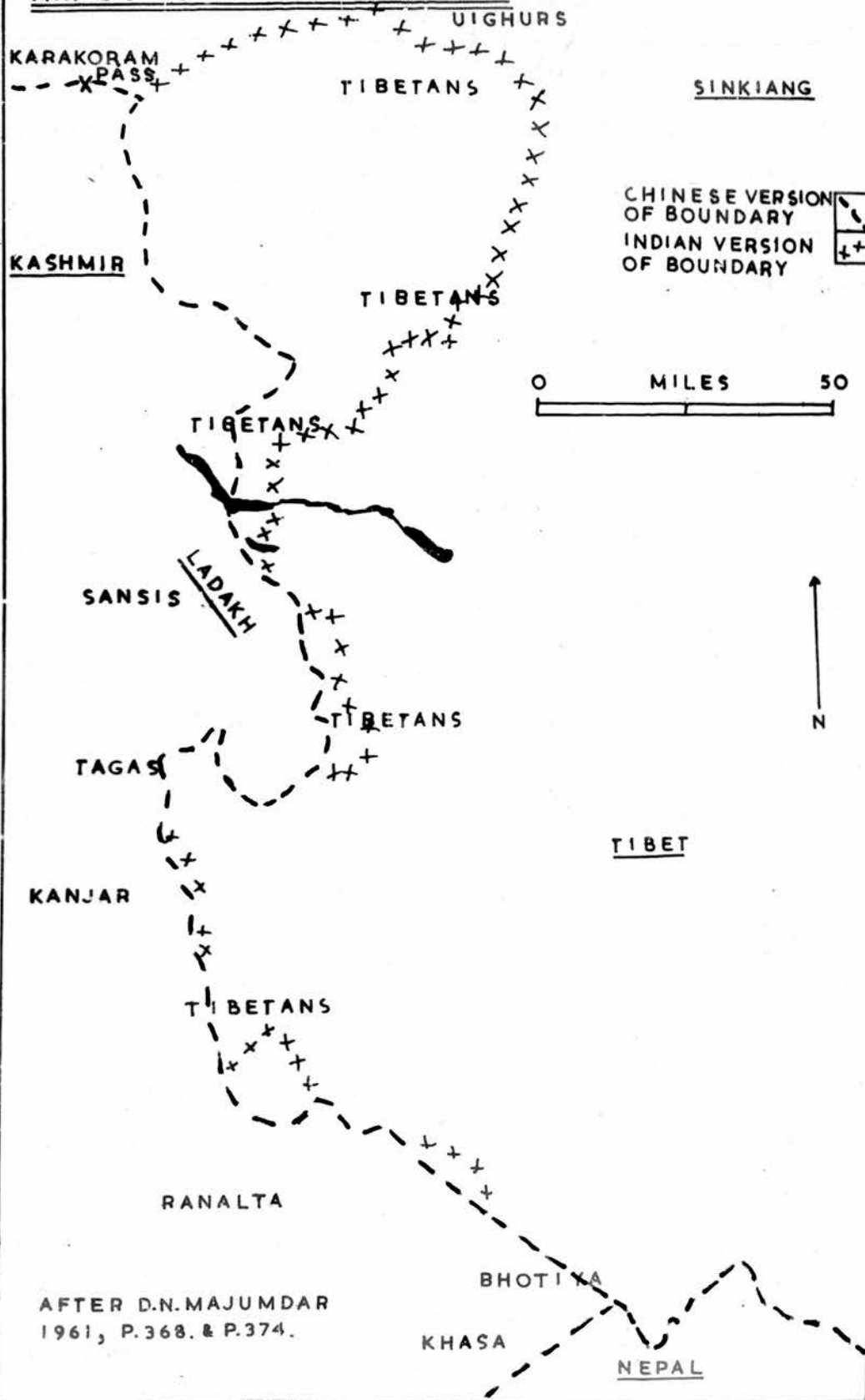
mile. Within the moist subtropical belt the Vale of Kashmir is the major population concentration with a density of 1,000 per square mile (it has an area of 1,600 square miles); Srinagar has a population of almost a quarter of a million. Between 6,000 and 12,000 feet there are numerous farming villages and trading centres, but north of the Great Himalayas settlement is sparse. The outer Himalayas at about 6,000 feet have some importance as a summer resort.

Communications within the region are often non-existent. 'At no point is the Great Himalaya penetrated by a graded vehicular road. The highest major highway traverses the Banihal Pass, 9,300 feet, into the Vale of Kashmir from Jammu'.² Of course the advent of the Communist regime in Peking has changed somewhat the transportation system within the region as witness the now much publicised Aksai Chin road (Map 3). This road was described to Premier Nehru of India in a letter of the 17th December 1959 sent to him by China's Chou En-lai.³ '... the motor road over 1,200 kilometres long from Yencheng in Southwest Sinkiang to Gartok in Southwest Tibet was built by Chinese frontier guards together with more than 3,000 civilian builders working under extremely difficult conditions from March 1956 to October 1957'. The isolation of much of the region is well demonstrated by the fact that until September of 1958 India was unaware that the Aksai Chin road existed although it passed through territory to which she laid claim.

With the outbreak of Sino-Indian hostilities in November of 1962 the tempo of new road building both from Sinkiang and the Indian side of the border has increased considerably, although it is confined to the edges of the

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2. N.Ginsburg (ed): 'The Pattern of Asia'; Prentice-Hall, New Jersey 1958, p.582.
 3. Indian Gov. Ministry of External Affairs: White Paper No. III, p.53, New Delhi, 1960.

MAP 2051 NO-N.W. INDIAN BOUNDARY



region.

Arable land is mainly in the southerly valleys below 7,000 feet and its use is intensive. The alluvial valley bottoms are used for irrigated rice, as are those terraces to which water can be brought in diversion canals. Winter crops of wheat and barley are favoured after the rice has been harvested. The higher terraced lands are used for millet and maize whilst those slopes unsuited to cultivation are often used for pasturing the village's cows and work oxen. Manure from these animals plays an important part in the cultivation of the arable lands. The burning of forest lands is encouraged in order to produce more pasture. Timber is used for housing and for export by river to the plains. Above 7,000 feet the growing season is limited to the period from April to October with the staple crops being spring wheat, barley and potatoes. The maximum height for cultivation is about 12,000 feet where the yak is used for ploughing. Cattle can be pastured in summer up to 10,000 feet, and sheep and goats up to 14,000 feet. Transhumance is practised, but by September the southern Great Himalayas are deserted. The people of Ladakh (Map 24) have much in common with their neighbours in Tibet for they do not go to the lower valleys in winter. In the dry area to the north of the Great Himalayas all agriculture depends on irrigation.

During the season of transhumance there is trade between the Vale of Kashmir and the settlements of Ladakh. Since 1950 the political situation has not encouraged trade, but there is still some movement of wool, salt, borax and yak's tails from Tibet and Ladakh to India and Indian manufactures and grain in return. The inhibition of trade in 1950 with the Chinese advance into Sinkiang and Tibet has been further emphasised with the deterioration of Sino-Indian international relations. The Karokoram Pass and the

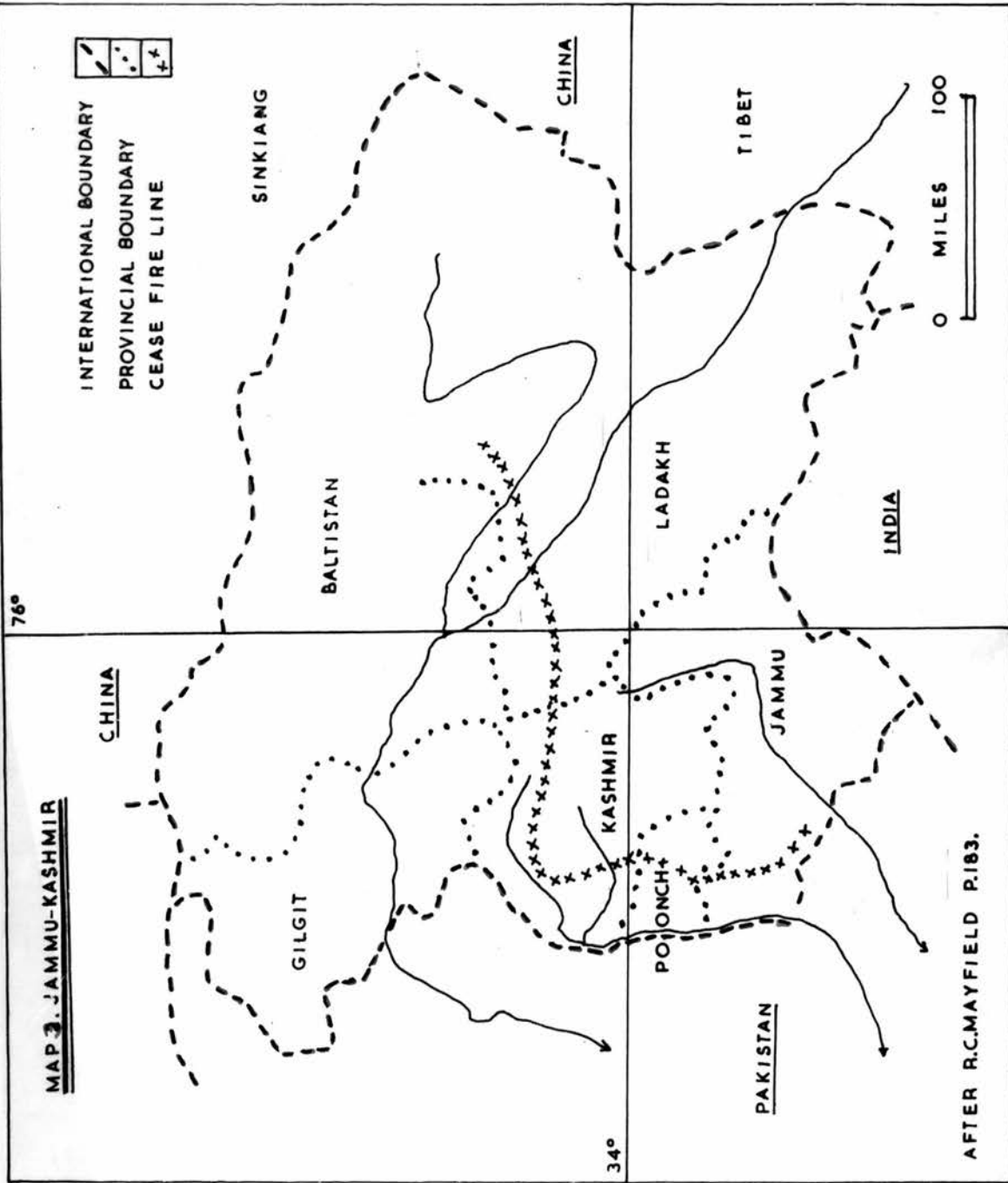
Baroghil Pass into Sinkiang are now closed to all north-south traffic.

The Sino-Northwest Indian border area is an ethnic and cultural mixture. Along the Indian version of the political boundary the population is composed of a sparsely distributed group of Tibetan immigrants (Map 2). These Tibetans and related Bhotiyas are Lamaist Mongoloids living in the high areas and culturally and linguistically closely related to the peoples on the Chinese side of the boundary. Until the deterioration in Sino-Indian relations there was a freedom of movement in the less accessible areas of the border zone which both the Indians and the Chinese since 1962 have been endeavouring to stop. As India recognised Tibet as part of the Chinese People's Republic Peking has some cultural basis for her claims to those areas inhabited by Tibetans and Bhotiyas along the boundary.

Although most of Ladakh is inhabited by Mongoloids of Tibetan origin there are some Pahari-speaking Caucasoids in the western part, and also the Sansis tribe which apparently has some Dravidian characteristics amongst their predominantly Indo-Aryan features. The Sansis, Tagas and Kanjar tribes are wanderers noted mainly for banditry; although occasionally they do practise nomadism in the boundary area they tend to remain on the Indian side (Map 2) and have been subject to efforts by the Indian government to settle them.

Kashmir is dominated by Dardic speaking Caucasoids of the Moslem faith, whilst the more southerly Jammu is mainly inhabited by Caucasoids of the Hindu Dogra faith and Pahari speaking Caucasoids who also favour Hinduism. However, all these groups favour the lower more westerly areas and it is only in the Chinese version of the boundary just south of the Karakoram Pass

MAP 3. JAMMU-KASHMIR



(Map 2) that they are affected by the possible imposition of the boundary line.

In the main the division between the Mongoloid peoples (speaking Tibetan and Bhotian dialects) and the Caucasoid groups is located within the southern areas of the Great Himalayas. Therefore either the Indian or the Chinese version of the boundary tends to affect the people of Tibetan origin, and not such more westerly Caucasoid groups as the Ranalta or Khasa.

It is difficult to deal with Sino-Indian relations in this area without first touching on the Indo-Pakistani dispute over Kashmir. Until recent times the name 'Kashmir' referred only to the Vale which surrounds the upper Jhelum River. From the Seventh Century A.D. onwards the Vale has been in alien hands with invasions of creeds (Hindu and Buddhist) and conquerors (Afghan, Mogul and Sikh). And yet the ethnic and cultural uniformity of the inhabitants of the Vale has not been particularly affected. The state of Kashmir came into being during the Nineteenth Century A.D. At the time the chief of the Hindu Dogra tribes held Jammu, Ladakh and Baltistan (Map 2) and purchased from the British the Vale and its adjacent hill country to add to Jammu and make into the State of Jammu and Kashmir. The Dogra administration was never fully accepted by the Moslem Kashmiris.

Before the partition of British India in August 1947 the Maharaja of Kashmir negotiated an agreement with Pakistan whereby he promised to make no treaties with other countries without prior notification to Pakistan. Pakistan was responsible for communication and supply arrangements with Kashmir, and in an effort to speed up the Maharaja's accession to Pakistan there was a blockade of grains, salt, sugar, and kerosene.

In August of 1947 rioting began in Poonch (Map 3) against the Maharaja's administration; this state had a population composed of over 90% Moslems. The Maharaja's Dogra Hindu troops were used to harshly crush the revolt in Poonch which led to a Moslem uprising with an influx of tribesmen from Gilgit and Pakistan's Northwestern Province to assist their persecuted brethren. Without doubt these Pathan raids were also the outcome of the loss of British tribute for there was considerable looting of fellow Moslems as well as Hindus. The tribesmen were aided by Pakistani officials and received much of their equipment from rich Pakistani nationalists.

The Maharaja fled and appealed for Indian aid. India asked for his accession as a price for their assistance and the Maharaja gave it. Indian troops quickly expelled the tribesmen from the Vale, but were stopped by regular Pakistani troops who claimed the Moslem population was being driven from Kashmir. India appealed to the United Nations and the Security Council set-up a commission. A cease-fire line was established in August of 1948 and has since become the division between India and Pakistan (Map 2).⁴

United Nations' efforts to solve this stalemate have been fruitless, mainly as India will not agree to demilitarising the region so that a free plebiscite may be held. There are many reasons for this attitude, but perhaps the main one could be that only Jammu has a Hindu majority and therefore India feels she might not come out of a plebiscite with as much territory as she now holds. To the Pakistanis the importance of much of the region lies in its hydroelectric potential and the protection of the water

4. Much of the material on Kashmir came from the following: R.C. Mayfield: 'A Geog. Study of the Kashmir Issue', Geog. Review Vol. 45, 1955; W. Barton: 'Pakistan's Claim to Kashmir', Foreign Affairs Vol. 28, 1949; A. Thorner: 'The Issues in Kashmir', Far Eastern Survey Vol. 17, 1948.

sources of the Sind and Punjab irrigation network. To India probably strategic considerations now outweigh all others.

The Sino-Indian boundary dispute in the Northwestern areas of the Indian subcontinent has been complicated by the strife between Pakistan and India in the region, and the concluding of an Agreement between Pakistan and China delimiting the boundary between the latter two countries on March 2nd 1963. Pakistan has delimited a boundary between China and the disputed areas of the Kashmir region of which she has control (i.e. Gilgit and Baltistan).

When the British domination of India ended in 1947 the subcontinent's northwestern border zone was not a boundary but a frontier. The British had protected India by a northerly line of buffer states. The challenge during the latter part of the Nineteenth Century and early Twentieth Century was felt to come from Tsarist Russia which was expanding rapidly into Asia. China was weak. The advent of Communism in China changed the political geography of the area, along with the replacing of the still formidable British power in India by the less impressive Indian might. China effectively occupied the former buffer zone of Tibet and the Sinkiang region which brought military power right up to India's borders. There was a considerable difference between sharing a boundary with a more powerful Asian neighbour and sharing it with a small neutral country behind which stagnated a weak China. Also as India had decided to favour Democracy as a political way of life she could not expect lasting sympathy from a China dedicated to Mao's form of revolutionary Marxism.

Sino-Indian relations following the establishment of Communist power in Peking were initially cordial. However, both India and China have

attempted to streamline their boundaries from the prior somewhat vague arrangements of the British Raj and Imperial and Nationalist China. The clash of interests did not come until after the mid-1950's. Until then India acted in a most sympathetic manner towards her large neighbour, supporting the Chinese right for a seat in the United Nations. The culmination of this friendship came in 1954 when the 'Panshila' of peaceful co-existence was signed, along with an agreement on Tibeto-Indian traffic. The latter led to India recognising Tibet as part of the dominions of China, restricted Indian trade to certain routes in Tibet, and a limited number of merchants, and in return for Indian representatives at Yatung, Gyantse and Gartok the Chinese were to have trade agencies at New Delhi, Calcutta and Kalimpong. Despite this much publicised agreement in 1954 a number of border incidents took place. During Chou's 1956 visit to India no mention was made of difficulties over the Sino-Indian border area which made Nehru think that the incidents at Bari Hoti were local mistakes. But India decided to take a closer look at the more remote regions of her frontier with China and there found Chinese troops in possession of territory India claimed. The number of border incidents increased with some bloodshed. The 1959 escape of the Dalai Lama to India did not improve relations along the border, but it was not until that year that the 1954 correspondence between India and China was made public.⁵

As the border area of the northwest of India was politically ill defined when the subcontinent gained independence China has been able to back her claims to territory which Delhi considered Indian with a certain amount of evidence. According to China as she had no part in the 1842 Treaty between

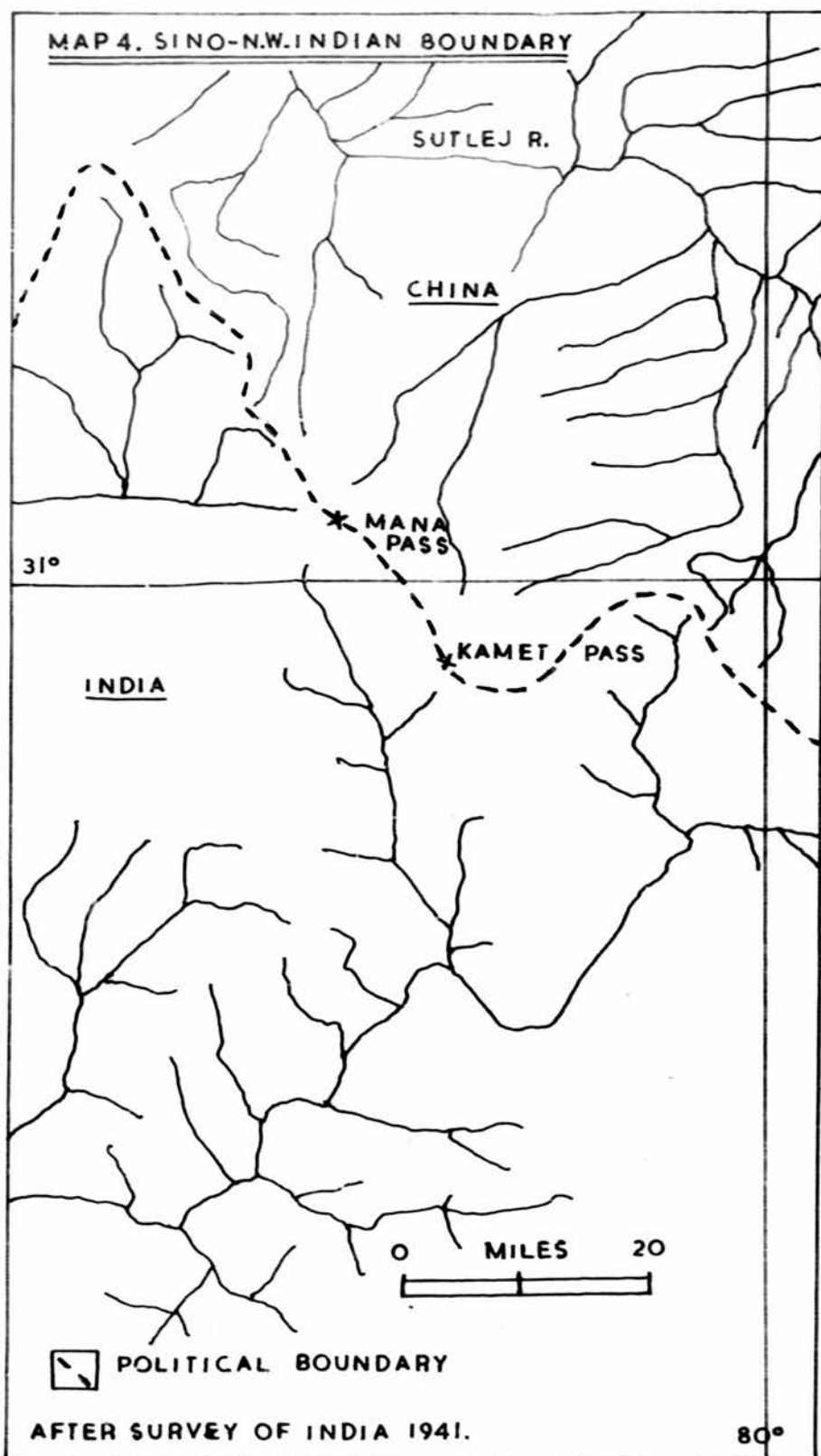
5. Indian Government, Ministry of External Affairs: 'White Paper I. Notes, Memoranda & Letters Exchanged & Agreements signed between the Government of India and China 1954-59', New Delhi 1959.

Kashmir and Tibet it is unacceptable, and in fact at this time there was no delimitation of the boundary. The Chinese claim the line shown on John Walker's 'Map of the Punjab, W.Himalaya and Adjoining Parts of Tibet' which was drawn for the East India Company and published in Cunningham's book 'Ladakh' in 1854. Peking also stated that much of the Indian-favoured boundary was the outcome of British imperialism at the expense of China. To these claims India replied that the Ladakh boundary with Tibet (see Map 3 for disputed areas) had been marked by stone cairns in 1687 and that representatives of both Tibet and China had signed the 1842 Treaty recognising this line. Walker's map was based on the work of Captain H.Strachey who had toured in Ladakh in 1847-48, but never visited the disputed Aksai Chin area. The first accurate map of Ladakh only became available in 1865. Similarly, although undelimited, there could be little doubt as to the eastern part of the North-western boundary as the 1954 Sino-Indian Agreement had authorised the six passes of Shipki La, Mana, Niti, Kingri Bingri, Darma and Lipu Lekh and these were boundary passes the southern end of which India had always controlled.

The Northwestern border area case was not so well documented on the Indian side as was the Northeastern region (See Section Five). In the Indian official maps there was a variety in the line of the boundary. Similarly, the fact that China could construct a road through Aksai Chin without India knowing of it until a year after it had been completed did not say much for the effectiveness of India's administration in the area she had claimed.

Both sides have tended to favour physical features in their boundary claims. The Chinese claim a line along the Karakoram Range which is the watershed between the Tarim River of Sinkiang and the Indus as far as the Karakoram Pass

MAP 4. SINO-N.W. INDIAN BOUNDARY



when it runs east along the mountain ridge to 78 degrees E., where it turns south-east along the crestline of the Karakoram Mountains down to the Kongka Pass. This cuts off all of Aksai Chin which the Indian delineation includes by a boundary running northeast from the Karakoram Pass to the Kunlun Range after which it goes southwards to the Lanak La Pass. South of the Kongka Pass China's boundary claim cuts through the Ane Pass, runs through the western part of Lake Pangong, around the western side of Spanggur Lake to Mount Sajum where it crosses the Indus River at 33 degrees N. after which it favours the watershed east of the Keyul Lungpa River and south of the Hanle River. From there it uses Mount Shinowu before running west to the junction of India, Ladakh and Tibet. India's boundary version goes across the centre of Lakes Pangong and Spanggur, cuts the Indus valley between Demchok and Tashigong, thence following the watershed between the Hanle River and the Sutlej tributaries via the Imis Pass, after which it crossed the River Pare 5 miles downstream from Chumar and on to Gya Peak at 78 degrees 24 minutes E., 32 degrees N. The following section from this point to the boundary with Nepal had more minor differences. The Chinese version crosses the Sutlej River to the west of Shipki Pass, follows the watershed south to traverse the Jadhganga River West of Tsungsha where it turns east through Mana Pass, to Mount Kamet afterwards to skirt the southern side of Wuje, Sangcha and Lapthal to again run along the watershed to the junction of India, China and Nepal. The main differences between the Indian and Chinese alignment in this section come where the Himalayan Mountains and main watershed are broken by passes and rivers and here the Chinese claims are into what the Indians consider their territory.

Both the boundary line favoured by India and that to which the Chinese adhere are within Boggs' 'Physical' category or Hartshorne's 'Subsequent', (e.g. Map 4 where the boundary is along a watershed). However, the boundary areas are as yet frontier tracts between two hostile states, neither of which

has integrated the peripheries of its territory in this area into the political administration.

With regard to physical geography the region is part of a belt of mountains running from Soviet Central Asia through Tibet to China's Sikkang. This arc of high land has often constituted a refuge area for peoples driven from the surrounding plains, and also provided a base for aggression into the lower areas (e.g. the Tibetans and Gorkhas). The human geography of the section dealt with here is diverse. Pakistan has some right to claim those Moslem areas of the Northwestern frontier if religion and culture are used as a basis for the settlement of the territorial dispute, although some of the hill tribesmen should be included in Afghanistan on ethnic and cultural grounds even though they are nominally Moslems. Much of the area of the Great Himalayas and further north is culturally and ethnically part of Tibet. Although the Chinese acknowledge that the Tibetans are different from themselves, despite both being Mongoloid, if Tibet has been integrated into the People's Republic there is a case for also including those areas of the Northwestern frontier with strong Tibetan ties under Peking's rule. Similarly Jammu can rightly be claimed by India on ethnic and cultural grounds, although at the time of Partition in 1947 both Jammu and Kashmir were economically part of western Pakistan. Whether these considerations of human geography are taken into account should any final settlement of the Sino-Indian border dispute eventually take place remains to be seen, but what is certain so far is that neither India nor China has managed to integrate successfully within their state areas the frontier zone and that a satisfactory or effective boundary does not exist. The Sino-Northwest Indian boundary is not a geographical divide as it has yet to be delimited, let alone implemented.

Western Committed Borderlands

1

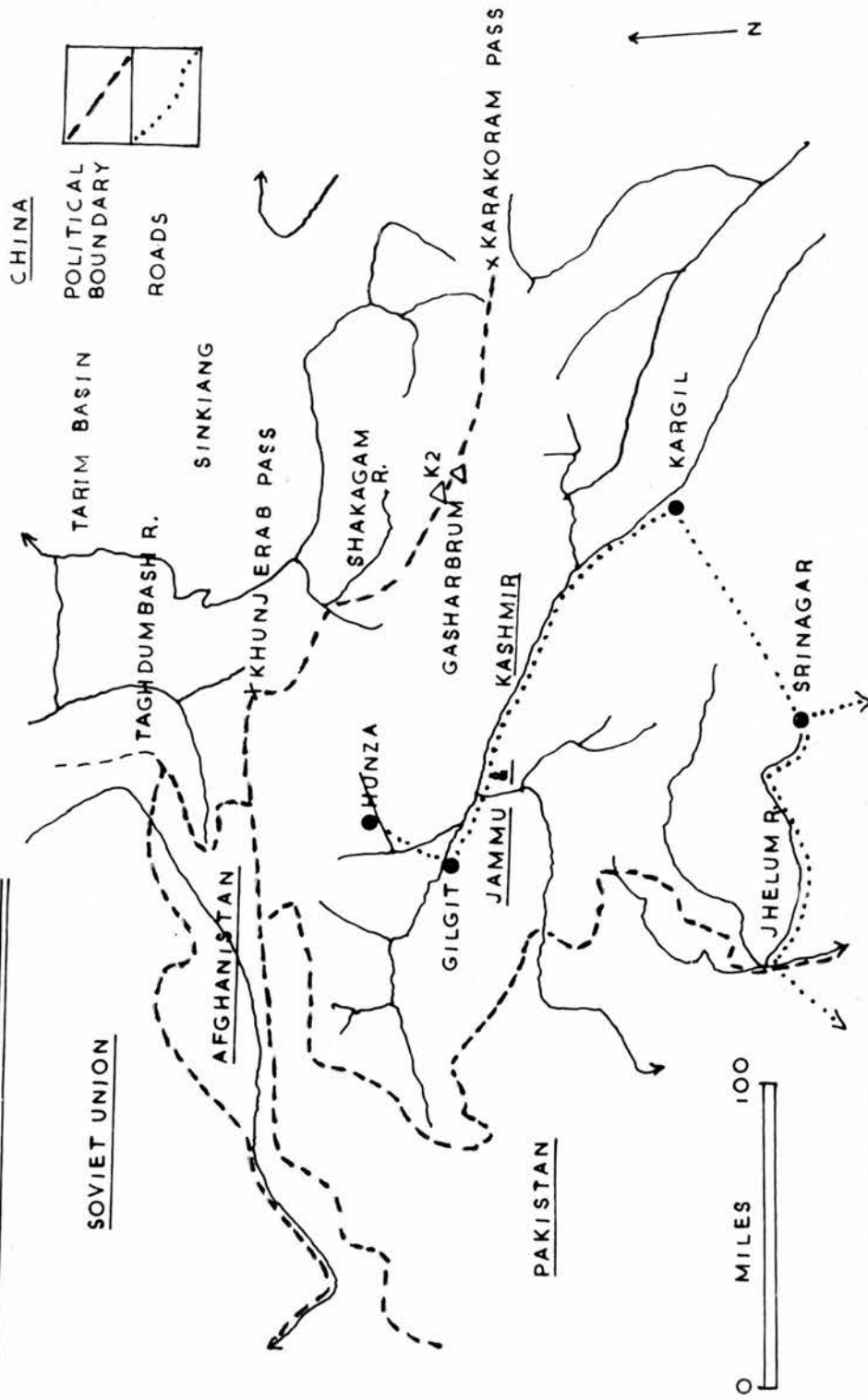
The Sino-Pakistani Boundary

2

On March 2nd 1963 a boundary agreement was concluded between Pakistan and China delimiting the Sinkiang-Baltistan area. Negotiations had commenced on March 28th 1961 when Pakistan had sent a note to China. Peking had replied on February 27th 1962 suggesting a provisional agreement on the boundary pending the settlement of the Kashmir dispute. This favourable reply by China to a state very much committed to the Western camp through military treaties was a little unexpected. Pakistan accepted the Chinese suggestion on March 19th 1962 and on May 3rd of the same year a joint communique was issued in which it was stated 'after the settlement of the dispute over Kashmir, the sovereign authorities concerned shall reopen negotiations with the Chinese Government regarding the boundary of Kashmir, so as to sign a formal Border Treaty to replace this provisional agreement'. On October 12th 1962 the procedure leading to the agreement was accepted by both sides and maps exchanged. Although the Sino-Indian border clash which commenced in October 1962 may have led China to view more favourably the concluding of a boundary agreement with Pakistan, it seems probable that the latter had not started negotiations with the intention of causing India discomfort.

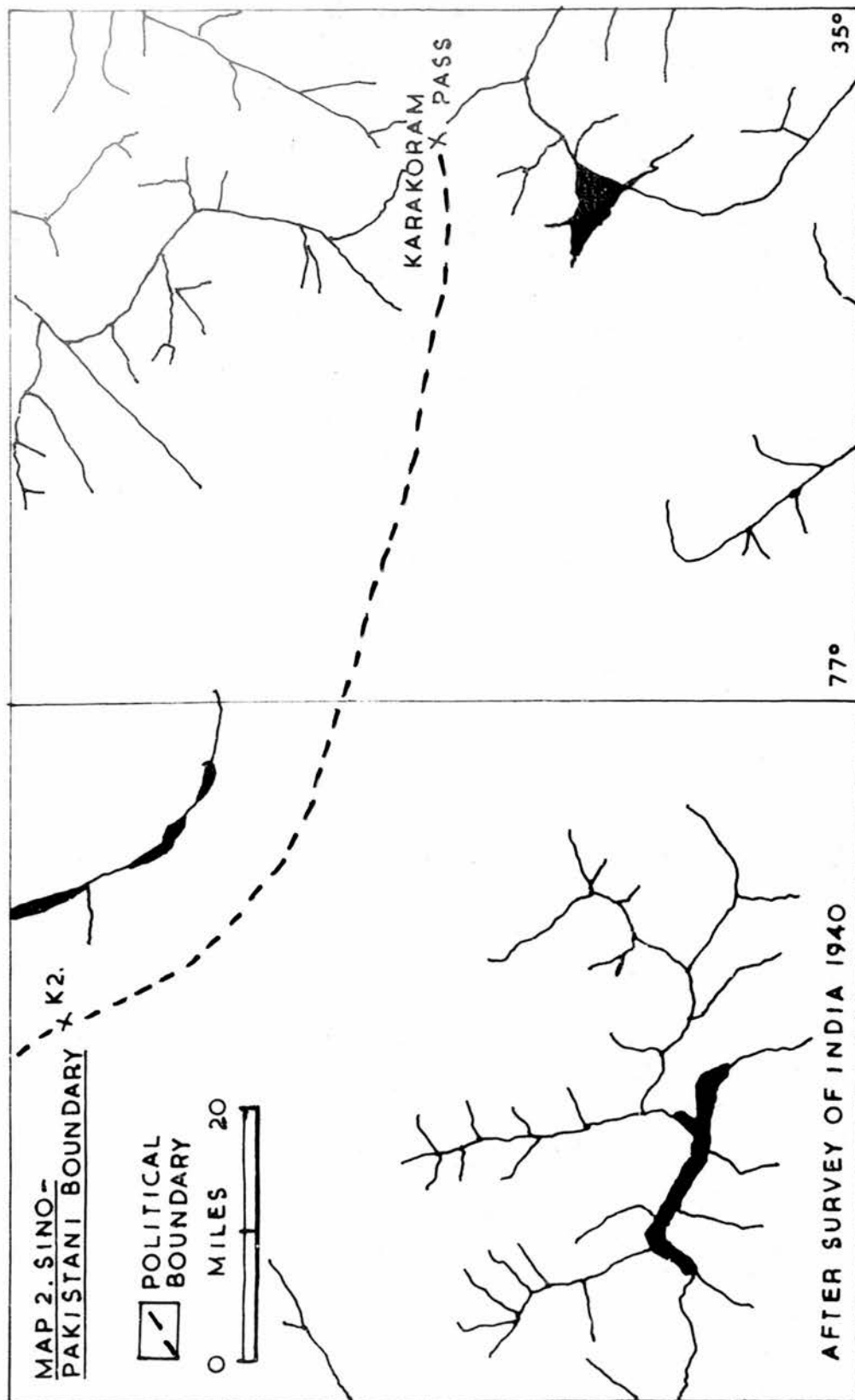
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1. The following have been of importance in the writing of this section: O.K.H. Spate: 'India & Pakistan', Methuen, London 1957; W.A. Wilcox: 'Pakistan', Columbia U. Press, New York 1963; C.B. Birdwood: 'Two Nations & Kashmir', Hale, London 1956; Caroe (O.): 'The Pathans', St. Martin's Press, New York 1958; K.B. Sayeed: 'Pakistan', Publishing House, Karachi 1960. D. Davis: 'The Population of India & Pakistan', Princeton U.P. 1951. I. Stephens: 'Pakistan', Penguin, Harmondsworth 1964.
 2. Much of the detail of the Agreement is derived from 'The Pakistan News', for March 15th, 1963. The Agreement is reproduced in the Appendix.

MAP OF SINO-PAKISTANI BOUNDARY



The boundary has been largely delimited from the Sino-Afghanistan-Pakistan junction to the Karakoram Pass. The line commences in the west at 74 degrees 34 minutes E. and 37 degrees 3 minutes N., and runs eastwards and then southeastwards along the watershed between the tributaries of the Tashkurgan River (part of the Tarim system) and the Hunza River tributaries (Indus system. See Map I). After passing through the Khunjerab Pass (Map I) the boundary runs southwards, still along the main watershed, to a mountain peak south of the Pass where it leaves the watershed to use the crest of a spur which is the watershed between the Akjilga River and the Taghdumbash and Keliman Su Rivers on the Pakistan side. There is a certain amount of disagreement between Pakistan and China over the following delimitation of the boundary for a short stretch. According to the Chinese version after leaving the southeastern extremity of the spur the boundary runs along part of the middle line of the bed of the Keliman Su to its confluence with the Kelechin River (Shown on Map I), whilst Pakistan favours a more northerly line running to the sharp bend of Shakagam River. Following this the boundary, according to the Chinese version, ascends the crest of a spur to follow it to where it joins the main watershed of the Karakoram Range at Shorbulak Mountain. The Pakistan version from the confluence ascends a corresponding spur to join the Karakoram 3 minutes further east, and 12 minutes further south, than the Chinese peak. The boundary line then follows the main Karakoram watershed separating the Tarim River drainage of Sinkiang from the Indus system. The line passes through the Mustagh Pass to the peak of K2 (Chogri), to Broad Peak; Gasherbrum Mountain to Teram Kangri Peak. It reaches its southeastern extremity at the Karakoram Pass.

After this tentative first delimitation of the boundary it was decided



to set up a Joint Boundary Demarcation Commission specifically to make more adequate surveys of the border area and to follow this by the establishing of boundary markers. Once this had been done maps would be printed showing the boundary markers and a Protocol would be signed. Article Six of the Boundary Treaty states that following the settlement of the Indo-Pakistan dispute of Kashmir the sovereign authority concerned would reopen negotiations with the People's Republic of China; the boundary treaty of 1963 would then be replaced by a more permanent one, but if Pakistan should be the 'sovereign authority' the previous agreement and Protocol would be the treaty. As yet the boundary has not been demarcated and has not been fully delimited.

In the delimitation of the Sino-Pakistani boundary physical features have been favoured such as the watershed line shown in Map 2. Therefore the boundary comes within Boggs' 'Physical' category or Hartshorne's 'Subsequent' division.

Despite Sino-Pakistani relations improving rapidly in recent months (in February of 1964 Chinese support of Pakistan in Kashmir was pledged) Pakistan is still much within the Western sphere of influence, notably belonging to the American and British inspired S.E.A.T.O. and C.E.N.T.O. Pakistan has often been offended by the sympathy shown towards India by the United States and Britain during the periods of crisis faced by New Delhi. The Karachi Government rightly considers itself a well proven ally of the Western camp and therefore feels that India as Pakistan's enemy and an aloof neutralist does not warrant either aid or sympathy from the United States and Britain.

Much of the geographical and historical material concerning the Kash-

mir dispute has already been dealt with.³ Pakistan controls about 27,000 square miles of northern and western Jammu and Kashmir and disputes India's control of the rest of these two provinces. Pakistan's slice of territory has a population of a little under a million. A surfaced highway runs from Rawalpindi, which is an important railway depot in Pakistan, through the Jhelum River valley to Srinagar, Jammu and the Indian railhead at Pathankot. Although this is still the main highway in the area there have been efforts to improve communications, notably between Srinagar and Leh. A new all-weather highway is due to be completed between Srinagar, Gilgit and Hunza in 1965. In general the roads in the area can only be described as cart tracks.

Pakistan's main claim to the disputed areas of Kashmir-Jammu are based on the criteria of religious allegiance. As this was the reason for the subdivision of India in 1947 Pakistan's case is not an unjust one. However, as has been seen in the geographical description of the region (See Sino-N.W.Indian Boundary section) there is a certain uniqueness in the cultural and ethnic geography of the band of high ground which stretches between the Indian subcontinent and the People's Republic of China. In 1951 the Pakistan Foreign Minister Sir Muhammad Khan stated before the United Nations Security Council⁴ on Kashmir-Jammu 'It is well known that ... every factor on the basis of which the question of accession should be determined - population, cultural and religious bonds, the flow of trade, the economic situation, communications, the geographical position, strategic consideration - points insistently in the direction of the accession of Kashmir to Pakistan'. If cultural and

3. See the chapter on the Sino-Northwest Indian boundary in this section.

4. Sir Muhammad Zafrulla Khan: 'Verdict on Kashmir'; Gov. of Pakistan, Karachi 1951. Quoted by R.C. Mayfield; 'A Geographic Study of the Kashmir Issue', p.186.

ethnic characteristics were used to determine the annexing of the Sino-Pakistani border area not only would India, Pakistan and China be able to make out a case for claims, but also Afghanistan. Pakistan can claim a physical bond with those parts of the region which are drained by the Indus and its tributaries, but China's Tarim Basin drainage system makes an equally good basis on the other side of the Indus-Tarim watershed.

The harsh environment of the border area has limited economic development and population densities are very low. During the summer of 1964 the Pakistan-Sinkiang trade routes were re-opened ending China's attempt to impose the boundary upon the landscape. China has not attempted to integrate the land and peoples on her side of the boundary into the state administration as the effort needed is apparently greater than the result for Peking would warrant. Improving relations between Peking and Karachi, and the stabilization of the border area by delimitation apparently makes both states content to see a frontier situation continuing to exist where a boundary has been largely delimited.

The Communist Borderlands

1

The Sino-Korean Boundary

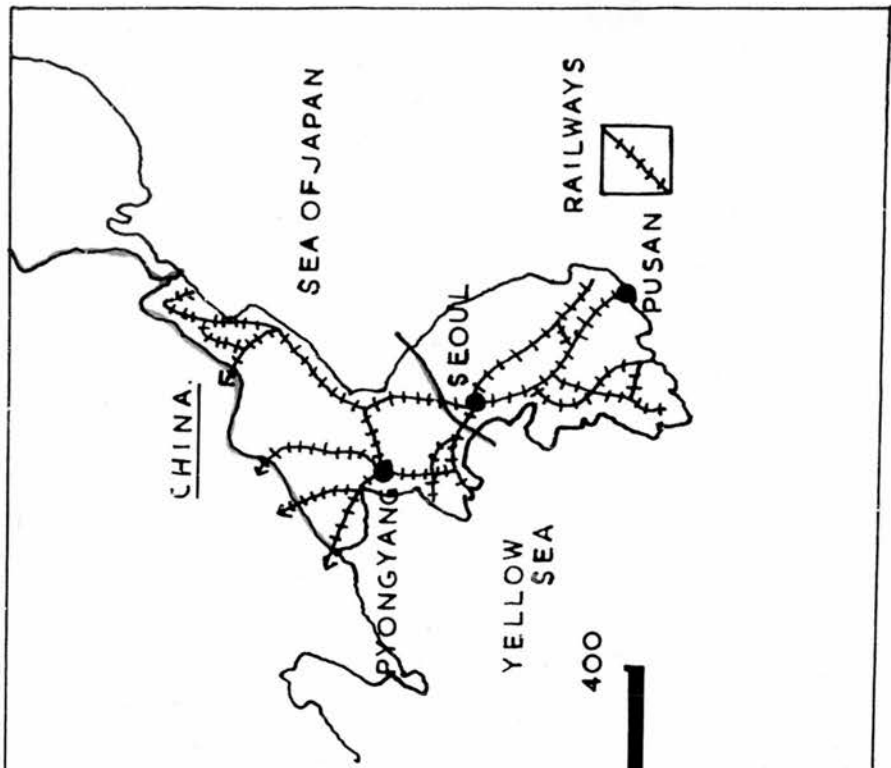
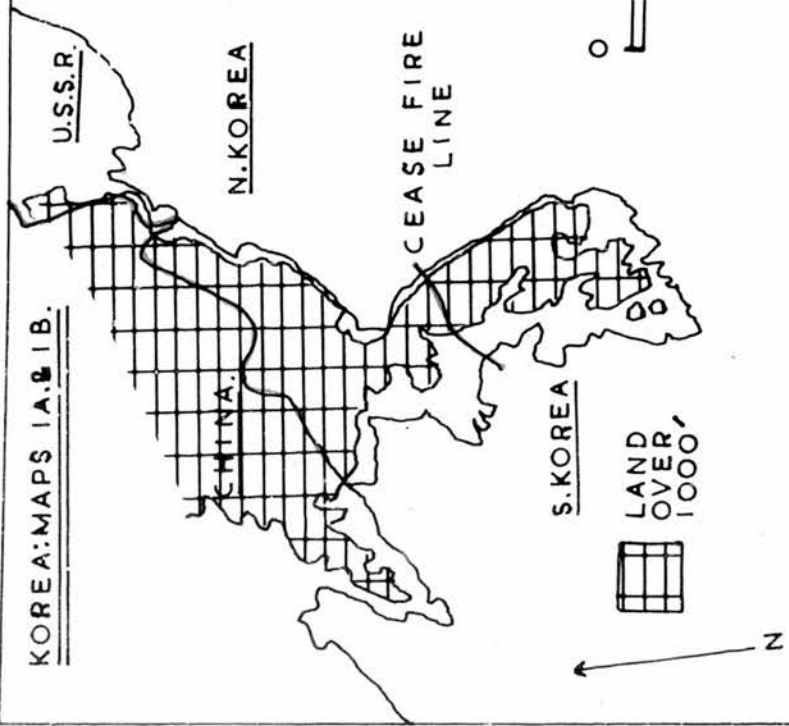
North Korea is a satellite of the People's Republic of China. Of those states with Communist governments only Albania and North Korea have supported whole heartedly the Chinese in their ideological dispute with the Soviet Union, and in the case of the latter, its position on the Chinese border would appear to have had a not inconsiderable influence upon the decision. The Sino-Korean boundary fits very firmly into the category of 'Communist' borderland, although within the range of Chinese Communism and not the variety favoured by the Soviet Union.

The Korean peninsula is at present divided into the Communist state of North Korea and the Western Committed country of South Korea. The boundary is the result of a military stalemate similar to that between North and South Vietnam. Despite this political upheaval within Korea the Sino-Korean boundary has not changed appreciably since about the Eleventh Century A.D.

Korean history starts with Tan Gun 4,000 years ago who was the mythical founder of the state. In 1122 B.C. the Chinese scholar Ki-tze emigrated to Korea with about 5,000 followers bringing Chinese civilisation and establishing the Dynasty of Ki-tze, which ruled until the Fourth Century B.C. Notable amongst these early cultural imports from China were those

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1. Books & articles of importance in this study have been A.J.Grajdanzev: 'Modern Korea'; John Day, New York 1944; H.H.Hess: 'Major Structural Features of the Western Pacific Area, Korea to New Guinea'; Bulletin of the Geological Soc. of America, Vol.59, 1948; G.M.McCune: 'Korea Today'; Harvard, Cambridge 1950; & 'Geographic Regions in Korea'; Geog. Review Vol. 39, 1949; G.D.Taylor: 'Korea: A Geographical Appreciation'; Geographical Branch of the Dept. of Mines & Technical Surveys, Ottawa 1951; H.M.Vinacke: 'A History of the Far East in Modern Times', Allen & Unwin, London 1960.

KOREA: MAPS 1A & 1B.



of agriculture, sericulture and building. Since 1000 B.C. Korea has been very much a part of the Chinese culture area, although adding a distinctive flavour to her borrowings. Even India's contribution of Buddhism introduced into Korea during the Fourth and Fifth Centuries A.D. came via China.

Although highlands (Map 1A) provide a transport hindrance for much of the area between the Korean Peninsula and the Chinese mainland the river lowlands at each end of the range have facilitated an easy routeway for migrating peoples. It is thought that the Japanese used the Peninsula in their movement into their islands, as did the Mongols in their attempt under Kublai Khan to conquer Japan. Similarly the Manchus and Tartars roamed over the area during their conquering periods. As an area of transit Korea has lacked the stability enjoyed by other more fortunate states.

The independence of Korea has been for only limited periods. The overthrow of the Mongols in China by the Ming Dynasty during the Fourteenth Century A.D. gave Korea one of its opportunities to throw off the domination of the Chinese. In 1392 the Yi Dynasty was established in Korea which led to 200 years of freedom until in 1592 the Japanese under Hideyoshi invaded. Hideyoshi died in 1598 and the Japanese exacted what they could before retiring from Korea. From this time there grew up the hostility between Korea and Japan. The victory of the Manchus over the Ming Dynasty in China in 1644 A.D. reaffirmed Chinese suzerainty over Korea. In order to stop the Koreans aiding the Ming rulers the Manchus had invaded Korea in 1627 and 1631. Tiring of foreign intervention from the time of the establishing of the Manchus in China Korea decided to have no contact with other foreign powers than China and some trading with Japan through Pusan

(Map IB). Korea's fortunes were closely tied to China although she was nominally independent under her own ruling house; when China was strong Korea prospered, and when the Celestial Empire was weak Korea suffered. Korea's isolationism during the years up until the latter part of the Nineteenth Century earned her the name of the 'Hermit Kingdom'.

The Sino-Japanese War of 1894-95 radically changed Korea's international position and China had to recognise Korea's independence and put aside any claim to suzerainty. Russian influence in Korea from this time blossomed until the ambitions of the Tsars were crushed by defeat at the hands of the Japanese. The Treaty of Portsmouth signed in September of 1905 made Korea a protectorate of Japan, and in 1910 Japan annexed the Peninsula.

Japanese rule was stringent, but provided Korea with a railway network (Map IB), an improved agriculture, heavy industry, hydro-electric power and a mining industry. All the major posts throughout Korea were in the hands of Japanese administrators so that the Koreans remained politically immature.

In 1943 the Cairo Conference adopted a policy aimed at producing a 'free and independent' Korea 'in due course'. On August 10th 1945 Japan requested an armistice when Soviet troops were almost at the Korean border. By August 14th the 38th parallel had been chosen as a division between the zones in which the Japanese would surrender to the Russians and the Americans,
²
 according to Grey a decision which was taken in Washington.

The occupying powers of the U.S.S.R. and the United States were supposed to meet to arrange the peaceful unification of Korea. In November of 1947 the United Nations established a commission to hold elections throughout Korea but the Soviet Union would not permit any entry into their northern

2. A.L.Grey: 'The 38th Parallel', Foreign Affairs Vol.29, No.3.
 for April 1951.

zone. In August of 1948 after elections the government of the Republic of Korea was established in the south. The U.S.S.R. set up the Communist Democratic People's Republic of Korea and in December of 1948 withdrew the last of their troops from the northern zone. In June of 1949 the Americans finished their occupation of the south. A year after the American withdrawal North Korean troops advanced into South Korea. The United Nations, largely in the form of the United States, intervened on the side of South Korea and China, feeling her own security challenged by United Nations' successes, brought massive assistance to the side of the Democratic People's Republic. Although the Soviet Union provided most of the equipment China emerged from the Korean War in 1953 the dominant power of North Korea.

The Korean War of 1950-53 froze the division of the Peninsula roughly along the 38th parallel, although it should be pointed out that in fact the line is not the actual parallel, but a more ragged truce-line in the vicinity of the parallel. This internal boundary that started as a military convenience in 1945 cuts across transport, telephone and telegraph lines and other distribution patterns developed during centuries of unity.

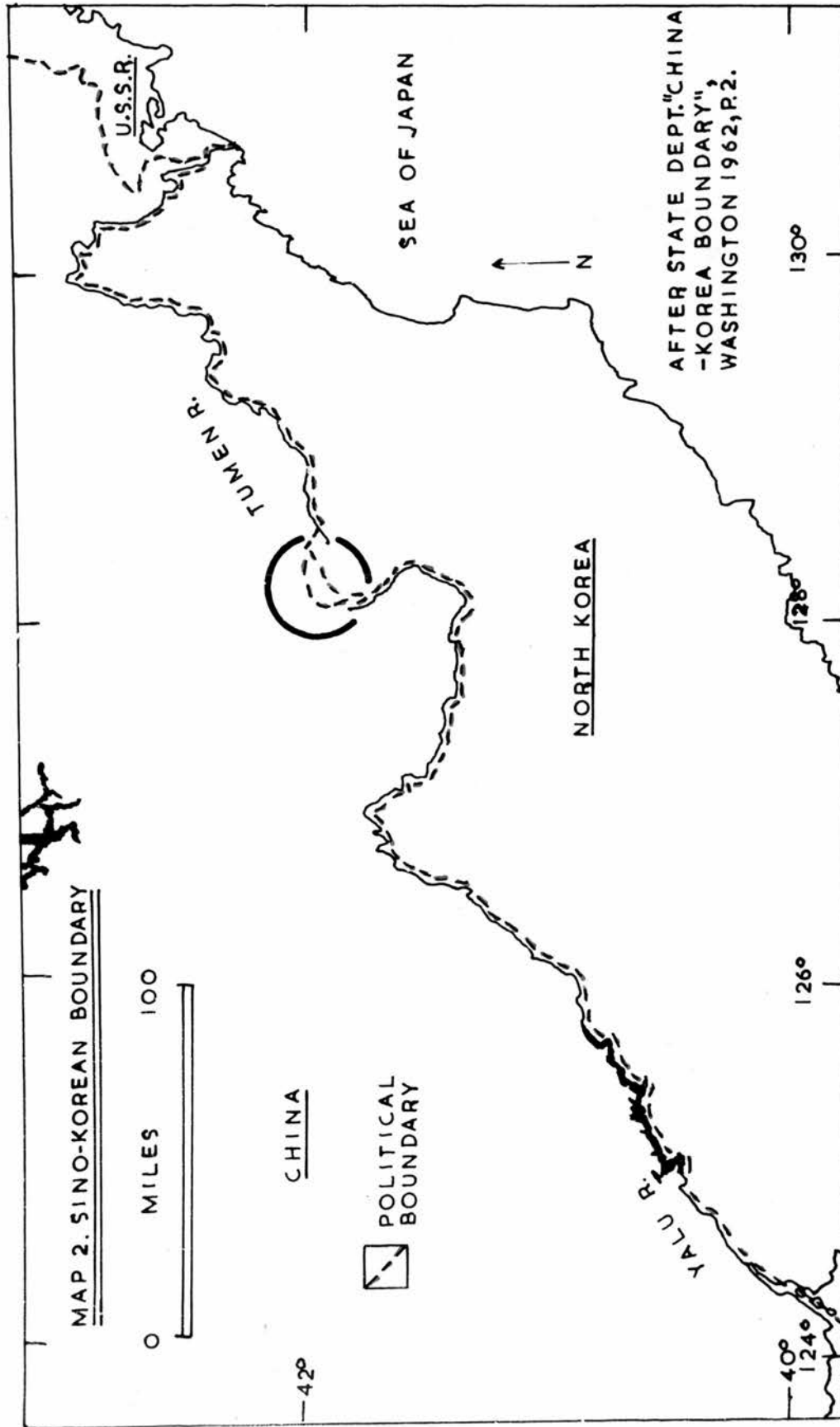
Korea has an area of 85,239 square miles and is a peninsula which extends from the mass of Asia for about 600 miles in a southeasterly direction. The southern half has a subtropical climate whilst the north is more greatly affected by the continental influences of Asia. The main mountain spine of the country runs from the Pai T'ou Shan (Map 3) southwards keeping close to the eastern coastline and forming steep slopes down to the water. Korea is basically a block inclined higher in the east than the west so that the eastern side is made up of fault escarpments divided from the water by a narrow coastal plain. To the west the plateau slopes gradually into plains and lowlands. There is a similar sloping from north to south as well. The

west and south have most of the rich alluvial lands favoured for farming, whilst the northern mountains contain much of the Peninsula's mineral and lumber wealth. The northern mountains are volcanic in origin and reach over 9,000 feet in height. The rivers of Korea are short and most of them rise at the eastern edge of the block. Few good harbours are to be found along the eastern coast in contrast to the deeply embayed coasts of the south and west.

The Koreans are Mongolian in race and closely related to the Chinese and Japanese. Their most distinctive ethnic characteristic is in language which is similar to the Central Asian Altaic group and related to Chinese. Many Chinese words have been borrowed and the alphabet is a modified version of the Chinese. It is thought that the Koreans migrated into the Peninsula at an early date from Central Asia, with later immigrations from North China and Manchuria to produce a certain amount of mixing. The present culture is basically Chinese with a strong flavour of Japanese customs and the inevitable icing of Western civilisation.

The population of Korea is about 30 million people, with two thirds of this total concentrated in the southern zone. Except for the difficult northern boundary area the Peninsula is densely populated and has a 2% increase per year. As with a number of Asian states both North and South Korea, with high population densities (350 per square mile), have about 80% of the population in agriculture. With much of Korea mountainous the amount of good agricultural land is limited. Certain areas of the south and west have population densities in the region of 1,000 persons per square mile.

The two Koreas were complementary to each other before partition. There was a certain contrast in the physical geography of the two areas. Single



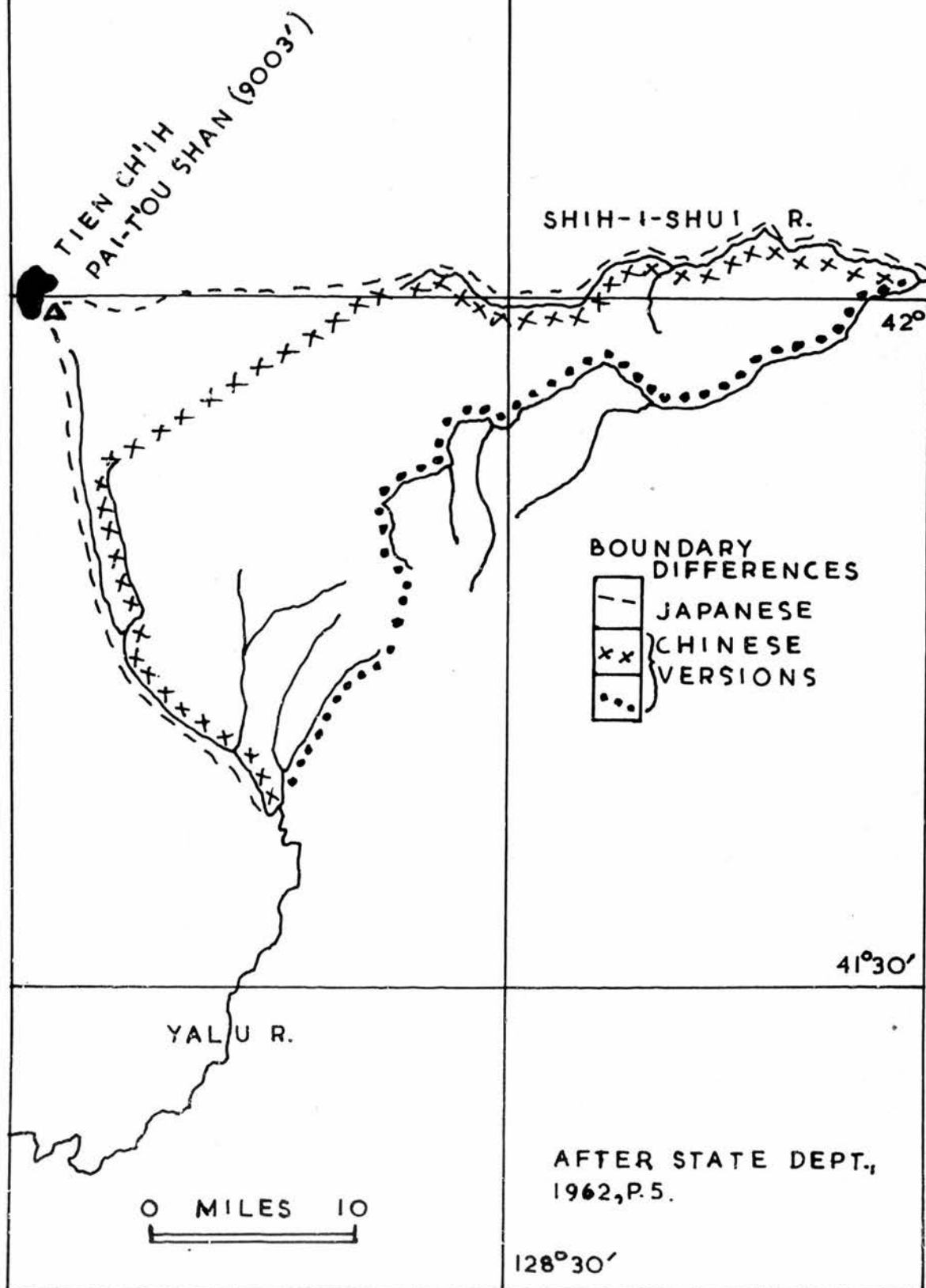
cropping was the rule in the north, whilst the milder south could double crop. The south was better equipped for agriculture whilst the north had most of the mineral, lumber and power resources. In the Pyongyang region the coal and iron resources made it the centre of Korean heavy industry (Map IB), whilst the second concentration of heavy industry developed in the northeast near the border where the reserves of iron ore are reputed to total 1,000 million tons, along with abundant coal. Also in North Korea are deposits of tungsten, copper, graphite and gold, whilst the hydro-electric potential of the People's Democratic Republic is good. In the South there are good deposits of manganese, copper and tungsten, but there is little else besides poor grade coal. Before partition in 1945 North Korea produced 85% of all minerals mined, and 90% of all the textile manufactures.

Before the division of Korea in 1945 the state provided more of a unit than does such a country as Burma or Laos today. From the latter part of the Nineteenth Century Korea has acted as a buffer zone between spheres of influence of more powerful states whilst retaining its own individuality. During the late Nineteenth and Twentieth Centuries Korea kept apart China, Russia and Japan until it was absorbed by the latter in 1910. Following the Second World War it was firstly a useful buffer between the power of the Soviet Union and the United States, and after the Korean War the People's Republic of China and the United States.

The Sino-Korean boundary (Map 2) is about 880 miles long. For all except 20 miles it follows the Yalu and Tumen Rivers and their tributaries and can therefore be placed in Boggs' 'Physical' or Hartshorne's 'Subsequent' categories. The Geographer of the State Department writes of the boundary,

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3. State Department: 'China-Korea Boundary'; Washington, June 1962, p.1.

MAP 3. SINO-KOREAN BOUNDARY



'Under normal circumstances, boundaries following rivers are considered to be demarcated. In this boundary, however, the lack of specific language in the various treaties concerning the location of the boundary within the rivers mitigates against such a classification. As a consequence, the boundary in the rivers should be classified as delimited'. Also for about the 20 miles between the headwaters of the Yalu and Tumen Rivers the boundary can be considered to be in dispute between North Korea and China (encircled portion on Map 2).

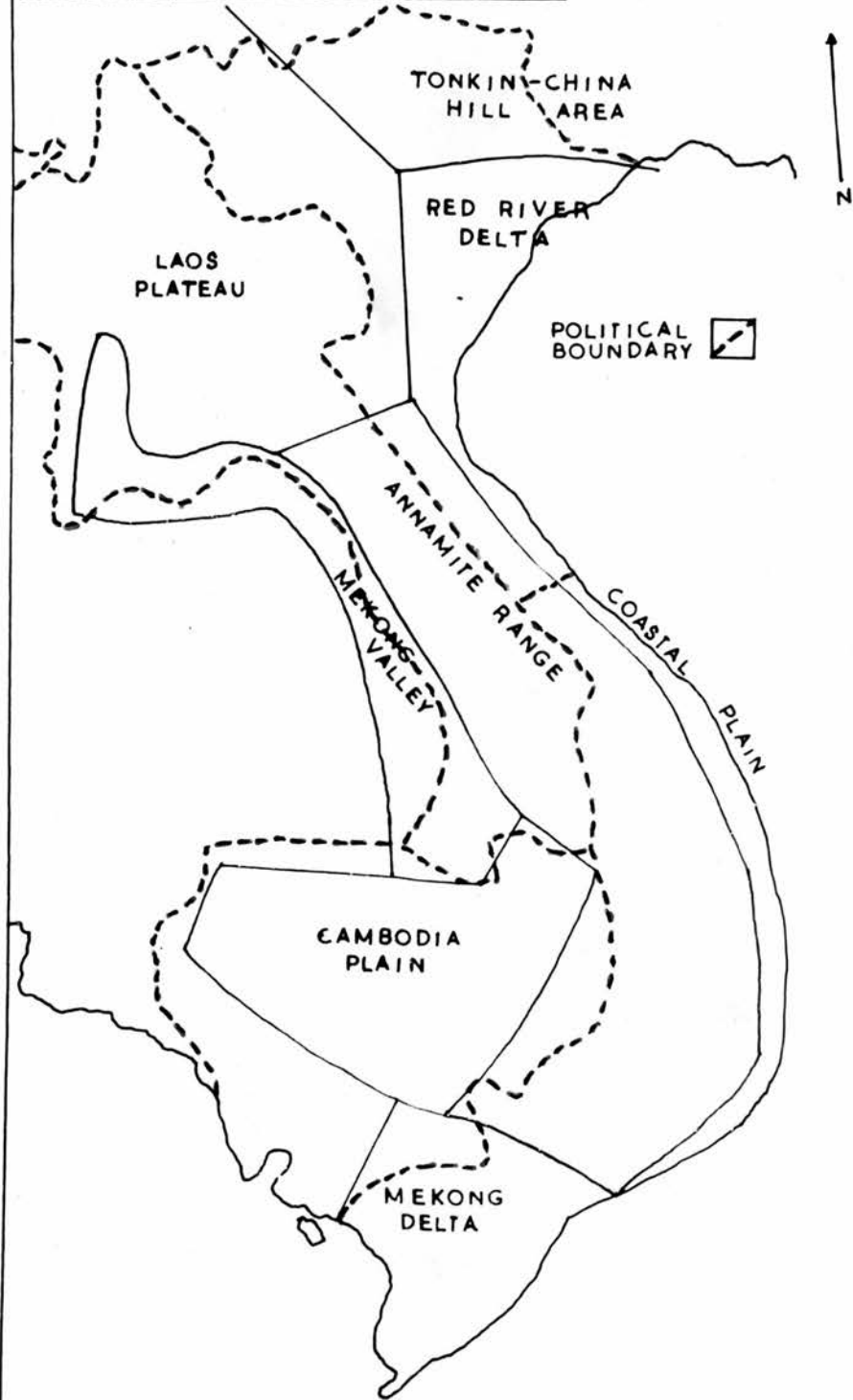
The area between the headwaters of the Yalu and Tumen Rivers (Map 3) is largely uninhabited. The first attempt to define the Sino-Korean boundary in this portion was in 1713 A.D. when a boundary monument was erected near the peak of the Pai-t'ou Shan on the watershed of the Tumen and Yalu Rivers. On September 4th 1909 China and Japan signed an agreement whereby they recognised the River Tumen as the Sino-Korean boundary. This agreement stipulated that the boundary should run from the 1713 marker to the headwaters of the Tumen River. This led to a controversy as to which of the streams constitutes the true headwater stream. Disagreement in this area continues with the Chinese claiming a line along the more southerly tributary (Map 3, second Chinese version) in such journals as 'China Pictorial' (November 1961), and the North Koreans adhering to the line shown on Japanese maps drawn during the period when Korea was a territory ruled from Tokio (e.g. Foreign Languages Publishing House: 'Facts about Korea'; Pyongyang, 1961, p.1.). The dispute is of minor importance and does not apparently impair the good relations between the two Communist states.

The Yalu River has been accepted as the Sino-Korean boundary since

1875, but along with the use of the Tumen River the boundary is not well defined. There has, for instance, been no formal allocation of islands in the rivers. Although China has concluded a number of boundary treaties with her neighbours it is perhaps a sign of the friendship existing between Peking and Pyongyang that there would seem no need for a more closely defined Sino-Korean boundary. Although there is a difference of 600 square miles of territory in the Chinese and Korean border claims a more generous attitude is taken by both sides than is the case along the Sino-Indian boundary.

Until 1945 the whole of the Korean peninsula made a coherent economic and political unit. The population was culturally and ethnically cohesive. The division which has since developed along the Cease Fire Line is leading to two distinct states. South Korea lacks the politically effective administration which governs North Korea, and the latter has progressed far in the direction of providing a government whose actions are felt throughout the state area. However, although North Korea has endeavoured to make sure that the boundary dividing the two Koreas functions as a division, the excellent relations Pyongyang enjoys with Peking has meant that in the north the Sino-Korean boundary has not been enforced to the same extent. There is comparative freedom of movement across the Sino-Korean boundary, and a large Korean minority on the Chinese side of the boundary. Korea has always been open to Chinese influences and the present situation is within the historical tradition. Although the political administration of the two states on either side of the boundary is as effective as almost any in Asia there is no urge to make the boundary into a division in the landscape.

MAP I. VIETNAM: PHYSICAL DIVISIONS.



AFTER C.A. FISHER, 1964. P. 530.

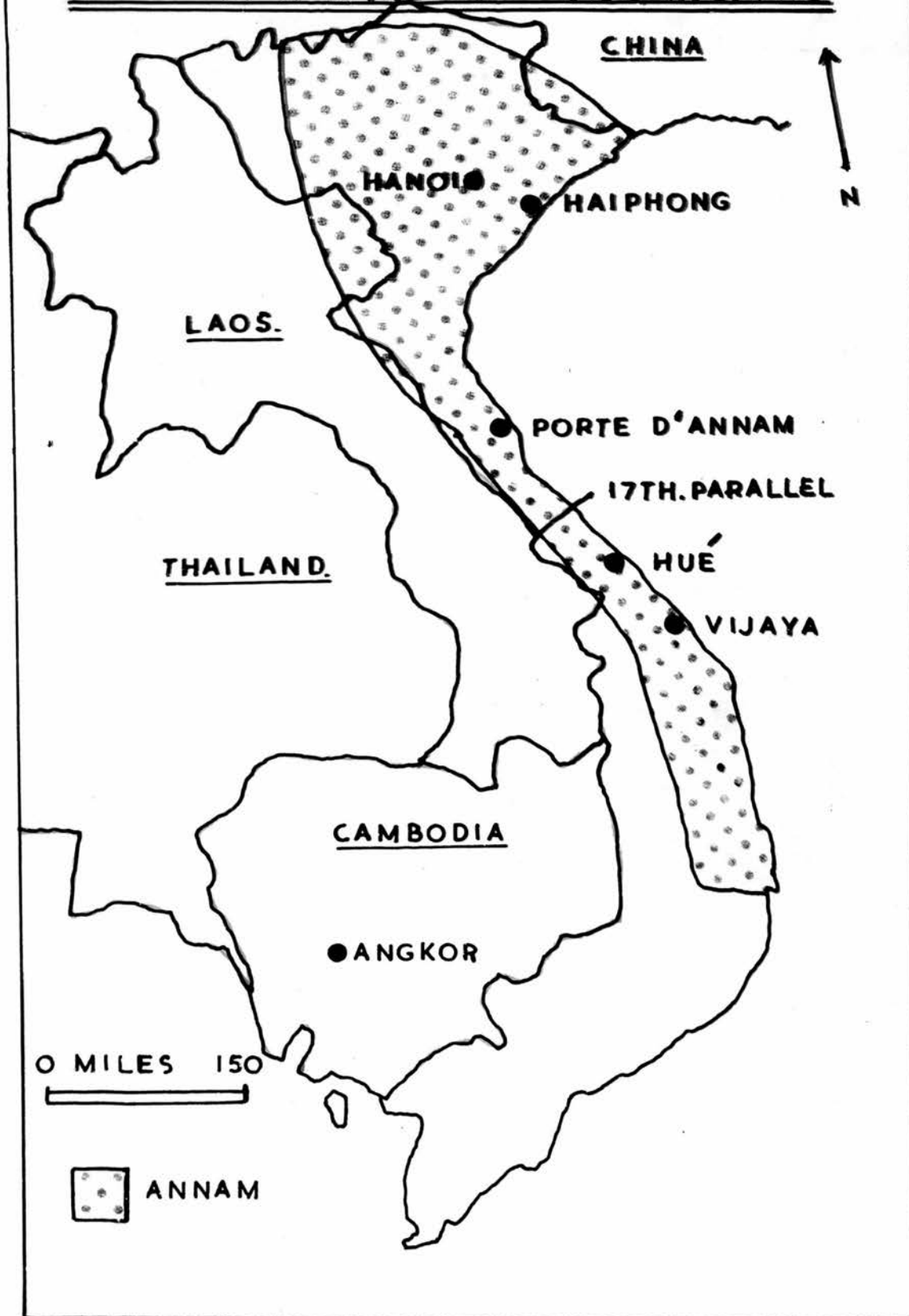
The Sino-Vietnam Boundary

North Vietnam is a state of 59,938 square miles with a population of some 15 million people. Like North Korea it is largely sympathetic to the People's Republic of China and has been divided from South Vietnam by a conflict of hostile ideologies, although it should be stated from the start that Vietnam lacks the geographical cohesiveness of North and South Korea.

The core area of North Vietnam is the Red River Delta (Map I) which was the centre of the Annamite Empire. The Delta accounts for about 5,800 square miles with an average population density of 1,250 persons per square mile. From III B.C. to 939 A.D. North Vietnam was dominated by the Chinese, so that according to Zelinsky² it became little more than an extension of south China. Chinese administrators and immigrants introduced their ideas of politics, art, law, and religion, plus their advanced agricultural methods. The severe flooding of the Red River in the Delta area was limited by Chinese dyking techniques, the Annamites were shown how to irrigate their rice fields and the secrets of renewing fertility after cropping by the use of green, animal and human manure taught them. North Vietnam has four months

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1. Of particular use in the writing of this chapter have been the following: C.A.Fisher: 'South-east Asia'; Methuen, London 1964; C.W.Bishop: 'Origin of the Far Eastern Civilisation'; Smithsonian Institute Publication 3681, Washington 1942; Canadian Dept. of Mines and Technical Surveys, Foreign Geography Information Series No.6: 'Indo-China - A Geographical Appreciation'; Ottawa 1953; W.Kaye: 'A Bowl of Rice Divided; the Economy of North Vietnam', China Quarterly No.9, 1962; S.McCune: 'The Diversity of Indochina's Physical Geography', Far Eastern Quarterly No.6, 1947.
 2. W.Zelinsky: 'The Indochinese Peninsula, A demographic Anomaly'; Far Eastern Quarterly No.9, 1950.

MAP 2. ANNAM IN THE LATE 15 TH CENTURY A.D.



when the winter temperature falls below 70 degrees F. and so the Chinese imported their ideas for raising a second crop during this period when the effectiveness of the rainfall was greater. A revolt against Chinese influence came in 939 A.D. after which the Annamites began a steady advance into the surrounding territories.

Despite the break with China the new kingdom of Annam was modelled upon Chinese example. In expanding the Annamites could not move north because of Chinese power, nor west due to the unhealthy uplands, so the south offered the most favourable routeway. Expansion was at the expense of the Champa which was a major state of impressive Indian culture, but poor geographical resources. In 1069 A.D. the Chams lost the land between Porte d'Annam and Hue to the Annamites (the Annamites called their kingdom Dai-co-viet). At this time the Khmers were challenging the Chams in the south so that Champa was fighting for survival. The Champa struggle was a long one but in 1406 their capital of Vijaya fell to the Annamites (Map 2). The Annamites found difficulty in holding together the long strip of coastal plain they had attached to the Red River Delta core area. The Nguyen family in the south, aided by Portuguese supplies of arms, challenged the Annamite efforts at centralisation and built two walls across the country to divide north from south. The Emperor was still a member of the Le family in the North, but the Nguyen family had established an independent monarchy in the South. The new southern kingdom continued the expansion down the coast and in 1692 conquered the remaining Champa lands. The southern monarchy was known in the West as Cochinchina, whilst the North Vietnamese territories were called Tonkin by the Europeans. In the latter part of the Eighteenth Century Cochinchina acquired most of the Mekong Delta area (Map I). At about the same time a dynastic conflict took place in which the Le Emperor retreated to China and many of the

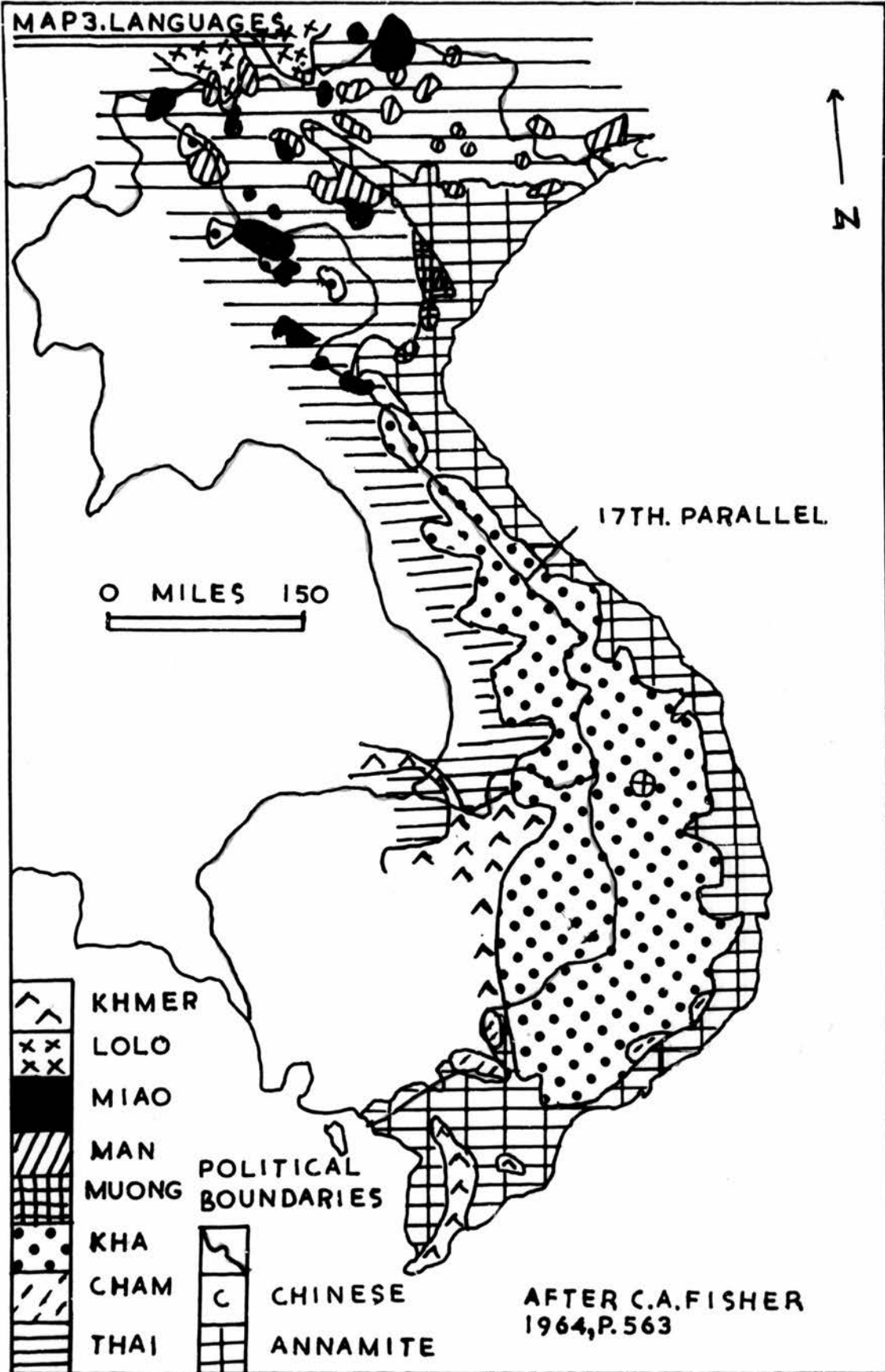
Nguyen family were killed. The Nguyen heir Nguyen Anh survived to enlist French support through the Catholic priest Pigneau de Behaine and take Hue in 1801 and Hanoi in 1802. As the new Emperor Gia Long he requested the official recognition of the Chinese which was granted with the proviso that Vietnam should send tribute to Peking every two years. The territories of Vietnam were divided into three parts for administrative purposes based on Saigon, Hanoi and Hue, a convenience that the French adhered to when they ruled the areas (i.e. the colony of Cochinchina, and the protectorates of Annam and Tonkin).

French interest in Indochina was dormant for much of the first part of the Nineteenth Century, but using the Emperor of Annam's hostility towards Catholic missions in his territories as a pretext France in 1858 bombarded Tourane and the following year captured Saigon. The Annamites ceded eastern Cochinchina to France in 1862, and in 1867 the rest was annexed. When the French discovered that the Mekong did not provide a routeway into China they moved their main sphere of activity northwards. A Franco-Annamite Treaty in 1874 opened the Red River to French navigation. A French expedition forced the Emperor at Hue to recognise a French protectorate over Tonkin and Annam. As the Chinese considered the Annamite lands as tributary to Peking they protested, but the Convention at Tientsin in 1884 and the Treaty of 1885 gained Chinese recognition of the Franco-Annamite treaties signed at Hue. In 1887 came the Union of Indochina. The main foci of French economic activity were the Mekong and Red River deltas. Throughout the Union all except the most minor positions were in the hands of Europeans. There was a tradition of resistance to alien cultural domination amongst the Annamites which dated from their relationship to

China and by the beginning of the Twentieth Century nationalism began to develop. The leadership of Annamite nationalism went to the discontented and frustrated elite who were often educated in France. In the late 1920's a most remarkable man entered upon the political scene of North Vietnam, namely Ho Chi Minh. In the 1930's his Vietnamese Revolutionary Association was banned by the French. By the time France fell to Germany in 1940 and Japan entered Tonkin those areas inhabited by the Annamites were centres of anti-French nationalism. Ho Chi Minh was in China during much of the Second World War organising the Vietminh which established a government in Tonkin at the end of the War. As has previously been mentioned with regard to Laos war broke out between the Vietminh and France in 1946. The supposedly temporary division of Vietnam in the region of the 17th parallel (which was a truce line) at Geneva in 1954 has become permanent largely due to South Vietnam's unwillingness to agree to elections to reunite the two states.

The war with France left North Vietnam in a sorry economic state. It had relied previously upon South Vietnam to supplement its deficiencies in rice, and now its own production from the land was dwindling due to damage to the irrigation network. The mining and manufacturing industries were in no condition to earn the foreign exchange needed for a food import. A period of agricultural and industrial rehabilitation followed. Yields per acre of rice were increased from 28 to 38 bushels and the agricultural acreage by 15%. Rice was rationed which gave the Hanoi regime a surplus by 1956. Communications within North Vietnam and from North Vietnam to China were repaired and extended. Aid has been mainly from China, although in the critical year of 1955 the Soviet Union supplied 170,000 tons of rice, plus 400 million roubles

MAP 3. LANGUAGES



(£35 million). Up until 1961 the Chinese had granted North Vietnam £180 million in aid, the Soviet Union £130 million and Eastern Europe about £32 million. In their 1961-65 Plan the North Vietnamese appeared to change to the U.S.S.R.'s economic model, but in 1963 China once again gained ascendancy and since then despite Soviet diplomacy her neighbour seems to be firmly within the Chinese sphere of influence. There is, however, the traditional antipathy of the Annamite population towards China and the million strong Catholic community which is of great importance within the economic network of North Vietnam.

The oldest area of Indochina is the pre-Cambrian folding which constitutes a large part of Cambodia and the southern areas of Vietnam and which is of a similar age to the massif of southern China. Subsequently a concentric circle of folds was built up around this nucleus. Primary folding is found in the mountains of the Yunnan-Burma boundary area, northern Vietnam and the Shan Plateau, but it is the more impressive mountain building of the Mesozoic which dominates northern Vietnam and eastern Laos. The Indochinese Peninsula has a 'ridge and furrow' relief pattern with such rivers as the Irrawaddy, Mekong and Red occupying structural depressions which they have widened. As might be expected such 'ridges' as the Annamite chain hinders movement and settlement. The Annamite mountains often exceed 6,000 feet and their malarial character has meant a lack of contact between the Vietnam Coastal Plain and the Mekong Valley (Map I). The Coastal Plain itself is interrupted by branching spurs from the mountains, these often contain short streams that have brought down rich alluvium. The Laos Plateau is an extension of the Yunnan Plateau which also thrusts a finger to divide the Red River and Sikiang-Yukiang systems; this Tonkin-China Hill area is inhabited by Thais dividing the Chinese and Annamite ethnic groups (Map 3).

The Red and Mekong Rivers have the advantage of coming down from considerable altitude and being fed by heavy monsoonal rains so that they carry much silt. 'Early Chinese records show that when Hanoi was first made capital of Nan Yueh over 2,000 years ago, the town which is now 60 miles inland was then on the coast.'³ Haiphong on the banks of the Red River suffers from severe sedimentation as a port. The Red River is not as long as the Mekong and its plains of more modest extent. At Hanoi the March to May dry season gives the Red River a flow of 25,000 cubic feet per second whilst between June and October this may be greater than 800,000 cubic feet per second. The Red River Delta region remains of prime importance to North Vietnam.

The ethnic and cultural make-up of Vietnam is in many ways a complex one. The two Vietnams total 125,889 square miles in area with a population of about 28 million people. The Annamite distribution is much as one might expect it to be with a concentration in the Red River and Mekong Deltas joined by a band along the Coastal Plain (Map 3), thus bearing a direct relationship to the historical development of the Annamite Empire. There are about 13 million Annamites in North Vietnam and 10 million in South Vietnam, with a further 300,000 in Cambodia and 50,000 in Laos. The Annamites are Pareocean in racial characteristics. Before the Chinese dominated the region in the Second Century B.C. the Annamites were of a limited culture and practised shifting cultivation. Basically the Annamite culture remains Chinese, although with a distinct Vietnamese flavour and some European innovations such as the Roman Catholic minority.

The Thais in North Vietnam number 800,000 which is about equal to those in Laos, and there are 25,000 in South Vietnam and 30,000 in Cambodia.

3. C.A.Fisher: 'Southeast Asia'; Methuen, London 1964, p.414.

They occupy many of the higher areas which make up the Sino-Vietnam border zone. The Khas along the Laos-Vietnam and Cambodia-Vietnam boundaries are of more primitive culture than the Thais.

A little of the Khmer and Champa days of ascendancy in South Vietnam remains. There are 40,000 Chams in South Vietnam and 80,000 in Cambodia. They were an earlier Pareocean people in the Indochina area with a tendency to have more pronounced Mongolian features than the later arrivals and a somewhat lighter skin. Despite assimilation by the more numerous Annamites the Chams still retain a culture which owes more to India than China.

The Mongoloid Lolo, Miao and Muong tend to favour the higher ground and practise shifting cultivation. Their tribes are found in minority pockets and where, as is the case in the Lolo and Miao groups, they straddle a boundary such as that between North Vietnam and China it is as yet of limited significance to them. The North Vietnamese relationship with China has meant a certain laxity with regard to the question of the boundary between the two Communist states. For example in the north-east of North Vietnam the boundary cuts across the Chinese population distribution, but as yet the Peking regime has made no claim to the territory inhabited by this Chinese minority within North Vietnam. There are about 100,000 Chinese in North Vietnam.

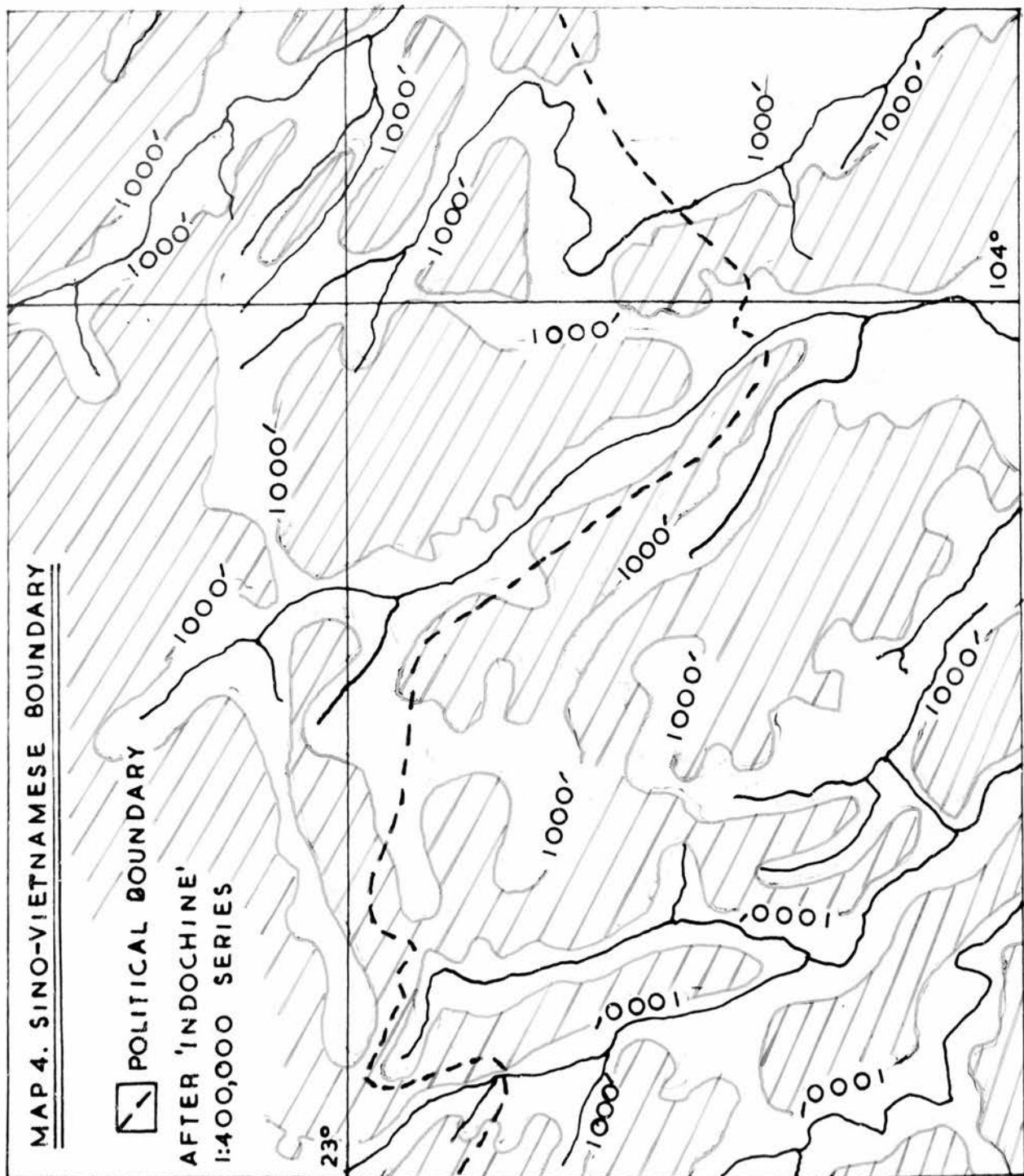
The Mans are hill peoples of Mongolian physical characteristics. They are scattered over much of North Vietnam and are also found in China. Their culture is based on shifting agriculture and their allegiance is to the tribe. The Mans migrated into Indochina in about the Thirteenth Century A.D. and became established in the zone between 1,000 and 3,000 feet.

In the main the Sino-Vietnamese boundary favours a number of minor crest-lines in the Tonkin-China Hill area, with the use of some river alignment in

MAP 4. SINO-VIETNAMESE BOUNDARY

 POLITICAL BOUNDARY

AFTER 'INDOCHINE'
1:400,000 SERIES



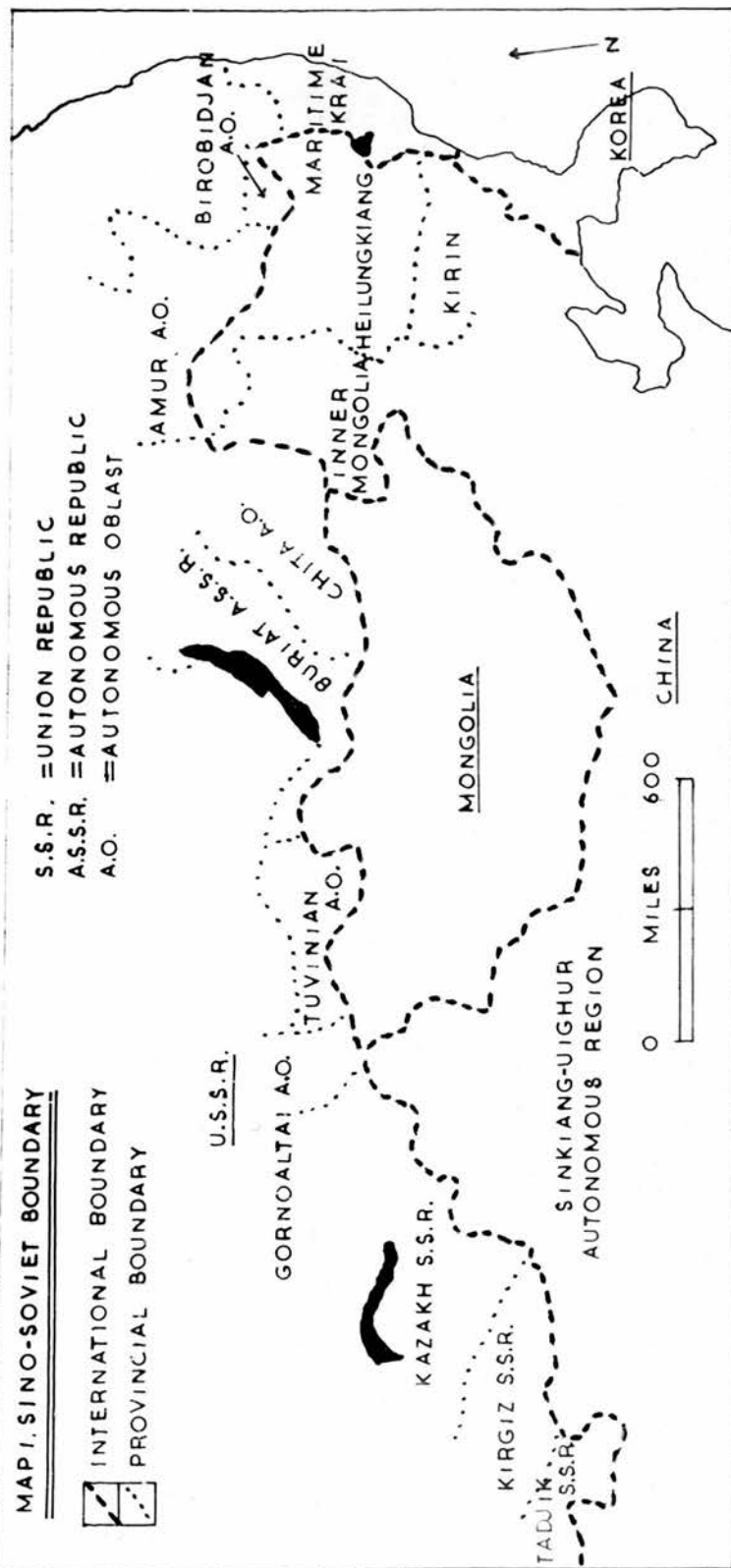
its eastern section. Until the Franco-Chinese Convention at Tientsin in 1884 and the Treaty of 1885 the area between North Vietnam and China was a frontier composed mainly of difficult terrain inhabited by backward hill tribes. The establishing of French power in Tonkin demanded a well defined borderline with the Celestial Empire and so the presented boundary was delimited. Having re-established the traditional Chinese suzerainty over North Vietnam the Peking regime appears to be satisfied to leave the boundary as it is, although as yet it has been only partly demarcated.

The Sino-Vietnamese boundary can be classified under Boggs' 'Physical' type or Hartshorne's 'Subsequent' category. With the exception of river crossings such as in the area of the Red River the boundary is delimited along minor crestlines. To demonstrate a typical section of the boundary Map 4 is included. The boundary cuts across cultural groupings and provides only the beginnings of a division within the landscape. Relations between Hanoi and Peking are excellent and there is a free movement of trade across the border assisted by two railway lines which run from Hanoi to Kunming in the west and Hanoi and Nanning in the east. North Vietnam makes an uneasy political unit with rivalry between such groups as the Annamites and Thais, and this is one of the reasons that the Hanoi Government is officially a coalition which includes nationalist non-Communists. However, North Vietnamese efforts at welding together the various cultural groups into a whole have been more successful by far than those of South Vietnam or Laos. Although North Vietnam lacks the unity of culture and race enjoyed by North Korea a beginning has been made in successfully imposing the influence of the central government throughout the state area. The friendly relations between China and North Vietnam and their interrelationship economically will prevent the boundary acting as a division within the landscape.

MAP 1. SINO-SOVIET BOUNDARY

INTERNATIONAL BOUNDARY
PROVINCIAL BOUNDARY

S.S.R. = UNION REPUBLIC
A.S.S.R. = AUTONOMOUS REPUBLIC
A.O. = AUTONOMOUS OBLAST



The Sino-Soviet Boundary

Although the Sino-Soviet boundary (Map I) has been placed in the Communist category of borderland along with such Chinese satellites as North Korea there is a distinct difference in the political situation which is beginning to be reflected in the geography of the boundary areas. The U.S.S.R. is the most powerful of the Communist states, and as such its relationship with China is one of equality. Differences between the Sino-Soviet relationship and the Sino-Korean or Sino-Vietnamese positions have been further emphasised since the growth of hostility between the U.S.S.R. and China.

In 1956 at the Twentieth Party Congress the first seeds of disagreement were sown between the Soviet Union and China when it became plain that Khrushchev was in the process of modifying the revolutionary concepts of Lenin and Stalin as was inevitable for the leader of an increasingly prosperous state. But even by the Moscow Conference in November of 1957 any breach between Peking and the U.S.S.R. was not apparent; having had much to do in the helping of the latter re-establish her influence over a rebellious East Europe China had at last achieved recognition throughout the Communist world as second only to the Soviet Union as a leader within the bloc. But there was an insurmountable difference between Peking and Moscow for China was a revolutionary 'have-not' and the U.S.S.R. a once revolutionary 'have' state. The differences in attitude became strikingly apparent during the Middle Eastern crisis in 1958 when China urged the Soviet Union to use her

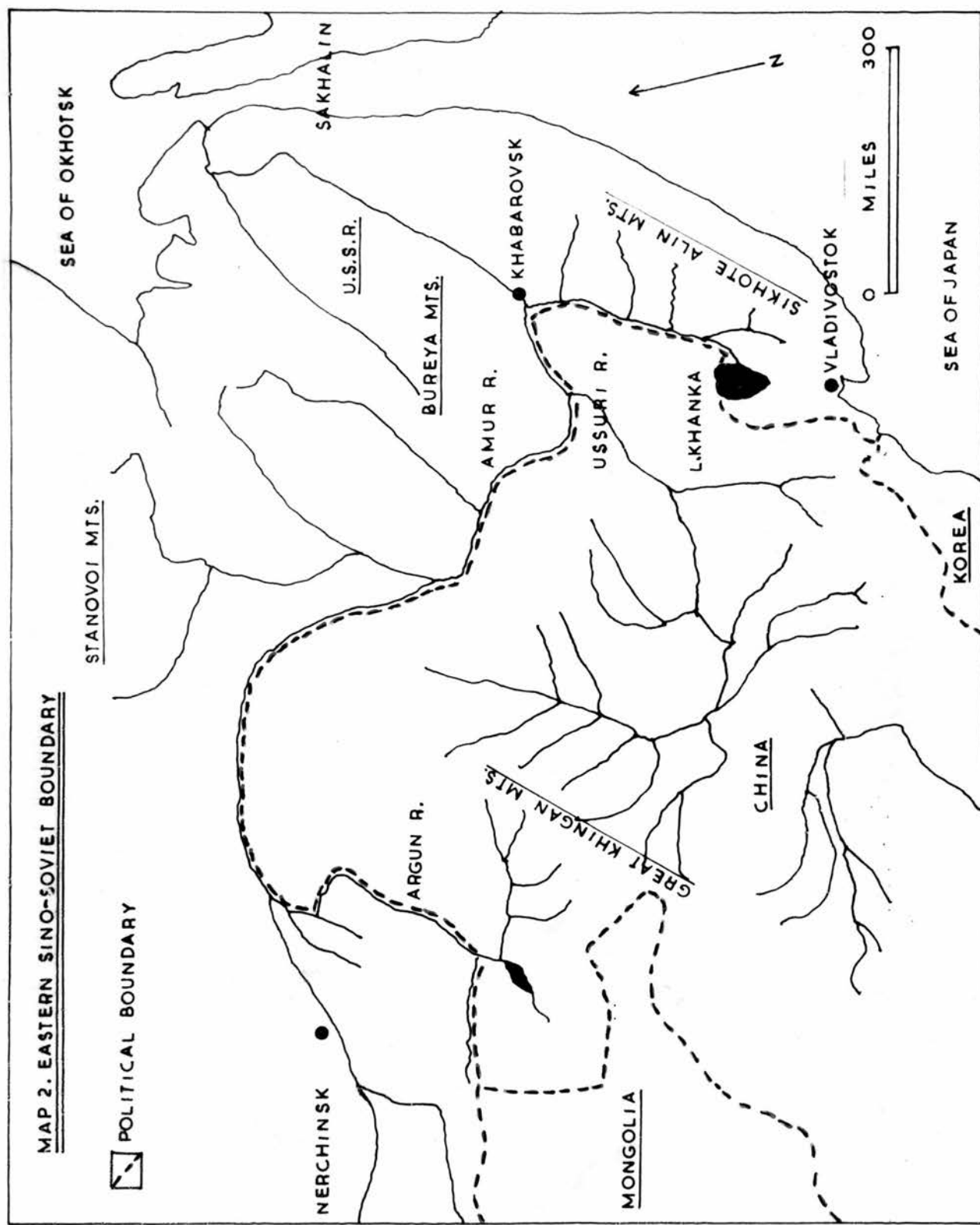
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1. The following have been of importance in the writing of this section: E.Crankshaw: 'The New Cold War, Moscow versus Peking'; Penguin, Harmondsworth 1963; W.A.D.Jackson: 'The Russo-Chinese Borderlands'; Van Nostrand, Princeton 1962; W.Kolarz: 'Russia & Her Colonies'; Phillips, London 1952, and 'The Peoples of the Soviet Far East', Praeger, New York 1954; T.Shabad: 'Geography of the U.S.S.R.'; Columbia, N.Y. 1951; A.S.Whiting & S.Sheng: 'Sinkiang'; Michigan State U, East Lansing 1958.

reputed ballistic missile superiority to crush American landings in the Lebanon and British in Jordan. From the summer of 1958 when China at last appreciated that Krushchev was serious when he stated war must be avoided at all costs the Sino-Soviet division became emphatic. The breach became known publicly to the Communist movement at the Third Congress of the Rumanian Communist Party in June of 1960, and the Communist parties of the world took sides at the Moscow Conference which followed in November of the same year. The replacement of Krushchev by Kosygin and Brezhnev in the Soviet Union in 1964 has led to little improvement in Sino-Soviet relations, and the difference between the two Communist states may prove insurmountable. It would seem unlikely that China and the Soviet Union will ever achieve the Communist ideal in inter-state relations.

Such power politics would not be of particular importance to a geographer except for the fact that the Sino-Soviet border region has been affected, perhaps most dramatically by the imposition of the boundary line in the nomadic lands of Central Asia where migration across the line has been stopped. A tradition of Sino-Russian rivalry has been revived.

The Urals have often been quoted as the boundary between Asia and Europe. But these mountains provide no barrier to east-west movement. During the latter part of the Sixteenth Century A.D. Russian adventurers first began exploring the areas east of the Urals in search of furs and minerals. They encountered only weak resistance from the indigenous tribes of the Vasyugan Plain where they built their first forts. The Russian Tsar annexed during the first decades of the Seventeenth Century these freebooter posts, which led to a further movement east into Siberia with new forts at Kuznetsk (1618), Yeniseisk (1619), Krasnoyarsk (1628), Ilimsk (1630)

MAP 2. EASTERN SINO-SOVIET BOUNDARY

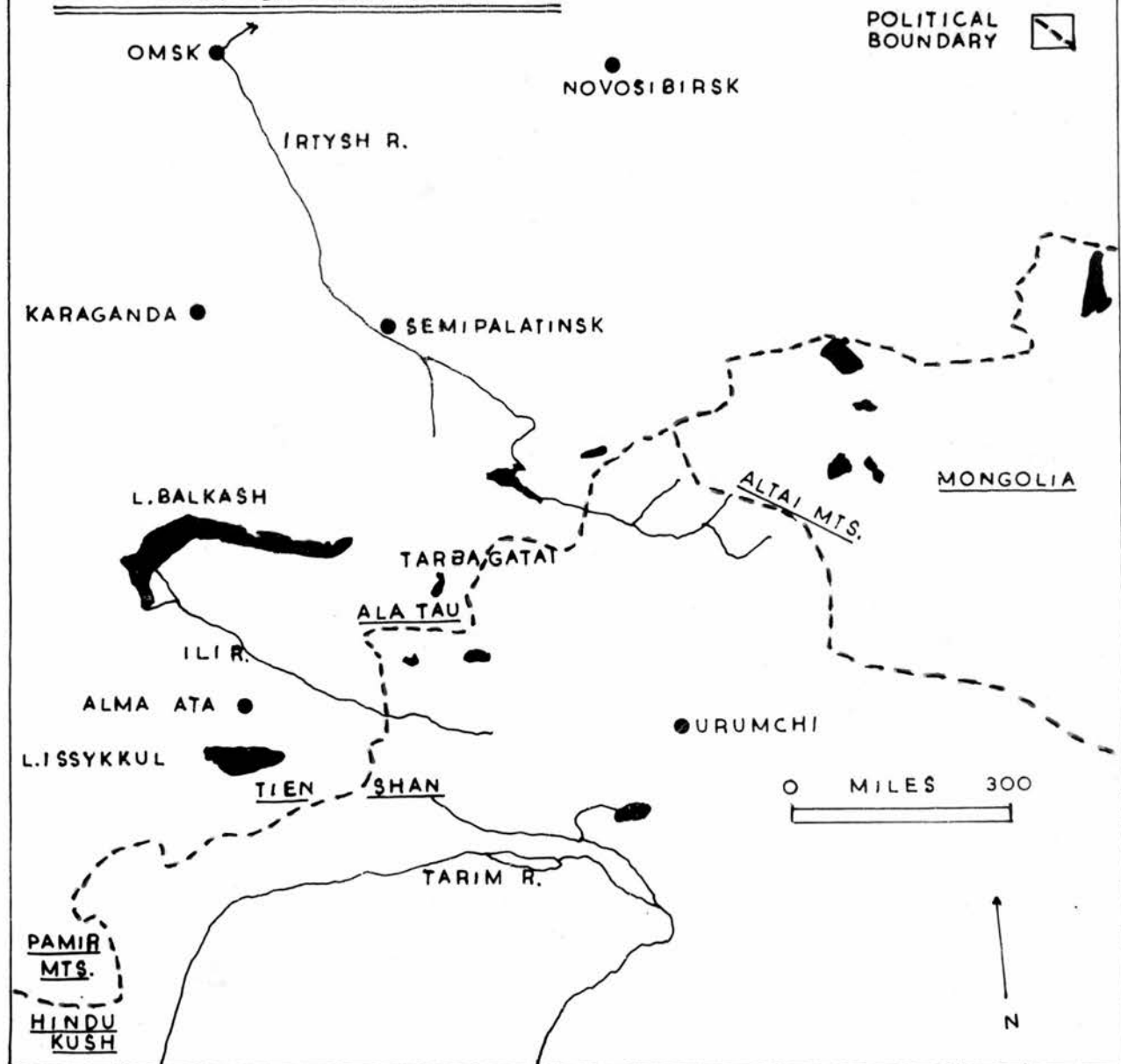


and Bratsk (1631). The Russian advance was along the steppe of the north away from the challenge of the more warlike tribes of Central Asia. It was not until Lake Baikal was reached that the Russians met any opposition when the hostility of the Buriat Mongols forced them further north into the Lena Valley, where they founded Yakutsk in 1632. In 1639 the Sea of Okhotsk (Map 2) was reached. Poyarkov entered the basin of the Amur River in 1643 and explored the waterway to its mouth. In 1655 Nerchinsk (Map 2) was founded at the meeting of the Nercha and Shilka. The Russian expansion through Siberia had been fast and deceptive for they had met no real opposition.

At the time when the Russians were moving eastwards Manchu power was establishing itself in China culminating with the setting up of the Ch'ing Dynasty in 1644. The defeat of the Buriat Mongols by the Russians and the establishing of Irkutsk in 1661 led the Manchus to encourage the Chinese to migrate northwards, but then to change this policy again between 1668 and 1673 'in the hope of preserving their patrimony intact.'² Chinese power under the vigorous new dynasty was impressive and the Russian advance was stopped. In 1689 the Treaty of Nerchinsk forbade the Russians to use the Amur and established the Sino-Russian boundary well to the north of the River along the Argun River and the Stanovoy Mountains (Map 2). The Manchus acknowledged Russian interests in northeast Siberia, but brought the Amur Basin firmly under Chinese control. From 1662 to 1722 perhaps the greatest of the Ch'ing Emperors, K'ang Hsi, ruled during which time the tribes of Manchuria, Mongolia, Sinkiang and Tibet were forced to acknowledge Chinese overlordship; under such circumstances the Russian expansionism was inhibited.

2. W.A.D. Jackson: 'The Russo-Chinese Borderlands'; Van Nostrand, Princeton 1962, p.31.

MAP 3. WESTERN SINO-SOVIET BOUNDARY



The Mongolian Plateau had great significance to the Russians as it provided a direct route to Peking and in 1727 the Sino-Russian Treaty of Kiakhta permitted Russian traders to cross Mongolia. The Tsar had to acknowledge Outer Mongolia as part of the Chinese Empire. Russian expansion found itself barred by the Chinese in Manchuria and Mongolia.

By 1757 the Chinese had completely broken the resistance of the Western Mongols so Dzhungaria and the Tarim Basin (Map 3) were united into the province of Sinkiang, which means 'the new dominion'. Sinkiang was not popular amongst the Chinese who wished to emigrate, despite favourable taxes, free land and seed. The local chieftains were vassals of the Emperor, but their tribesmen resented the Chinese immigrants. Frustrated in the Far East Russia sought further lands in western Siberia where Chinese power was weakest. In 1716 Omsk was established, followed by Semipalatinsk in 1718 (Map 3). By the end of the Eighteenth Century Russia had gained control of the Turkic tribes of the Altai Mountains and the northwest boundary of Outer Mongolia was delimited. By this time the Ch'ing Dynasty had passed its high water mark and had begun to decline in power.

The weakness of the Ch'ing Dynasty was demonstrated to the world for the first time following the Opium War of 1840-42. In 1846 a Russian expedition was sent to explore the Amur and in 1850 the Treaty of Nerchinsk was violated when a fort was built at Nikolayevsk at the mouth of the River. Nicholas Muraviev, the Governor General of Eastern Siberia, organised an expansion at Chinese expense moving east from Lake Baikal and south along the coast from Okhotsk. The 1858 Treaty of Aigun established a new Sino-Russian boundary along the Amur from the mouth of the Argun to the Pacific (Map 2). The territory south of the Amur and east of the Ussuri was jointly occupied and Khabarovsk founded (Map 2). At the 1860 Treaty of Peking Russia took complete

control of what is now known as Maritime Krai (Map I) and further land taken from Manchuria. In 1872 Vladivostock was established as a Russian port as the problem of winter ice was less severe than at Nikolayevsk.

The Tsarist drive also got under way in the nomadic Kazakh lands of the west where allegiance was to the Ch'ing Emperor. The Russians had greater accessibility to Central Asia than the Chinese based on Peking. By 1854 the Russians were southeast of Lake Balkash and Alma-Ata was founded (Map 3). The Treaty of Peking in 1860 also began the delimitation of the Inner Asian boundary between China and Russia. In 1864 the Treaty of Tarbagatai delimited the boundary south of Lake Issyk-Kul (Map 3). The Russian ambitions were assisted by a series of revolts against Chinese authority in Sinkiang, although the Chinese managed to crush the rebellious Moslems (Dungans) and made Sinkiang a regular province of the Empire in 1884.

All the Manchus could do to counteract Russian expansion was to encourage Chinese settlers along the borderlands. In 1878 the Ch'ing Dynasty gave its official permission to the emigration of the Chinese into Manchuria. The Chinese needed to act for in 1891 the Russians started constructing the Vladivostock to Khabarovsk section of the Trans-Siberia Railway, and during 1892-95 construction started in the opposite direction from the Urals to Lake Baikal.

Russia felt her position in the Far East challenged by the rising power of Japan who had defeated China in 1895. Shortly afterwards Russia gained Chinese permission to build a railway from Lake Baikal across Manchuria to Vladivostock and in 1897³ obtained mining rights in southern Manchuria, permission to extend the railway from Harbin to Dairen and leases to Port Arthur

3. Carnegie Endowment for International Peace: 'Treaties & Agreements with & Concerning China', Washington 1921; also for 1919-29, Washington 1929.

and Dairen. The Boxer Rebellion of 1900 demonstrated Chinese frustration at European intervention.

In 1905 Russia was defeated by Japan, but by the detente of 1907 agreed on separate spheres of influence in China. Russia's sphere was northern Manchuria, Outer Mongolia and Sinkiang. In 1908 all legal bans on immigration into Manchuria were completely lifted and settlers moved northwards, helped by the railways. In 1911 the Ch'ing Dynasty was overthrown.

Russian penetration of Sinkiang during this period was economic. During World War I there were serious revolts against the Russians by the native populations who resented the loss of some of their richest lands. The situation was changed in 1917 with the advent of the Russian Revolution, for the Soviet leaders initially tended to disassociate themselves from Imperial policies. By 1923 Soviet authority had become established throughout Siberia, but the revolutionary state was weak. However, an agreement with the local Chinese governor of Sinkiang permitted the U.S.S.R. to set up consulates at Sharashune, Chuguchak, Kuldja, Kashgar and Urumchi, and by the end of the 1920's all of Sinkiang's foreign trade was in Soviet hands. In 1930 the Semipalatinsk to Alma-Ata (Map 3) part of the Turkestan-Siberian Railway was completed to assist the economic assault on Sinkiang. But in 1931 Japan invaded Manchuria, thousands of immigrants entered Sinkiang and the Chinese Moslems (Dungans) rebelled. The Chinese Governor had to call on Soviet assistance which gave Moscow free movement in the Province. Further revolts of the Turkic Moslems of the Tarim Basin also required Soviet troops to quell them in 1934. From 1932 to 1943 Sinkiang was a Soviet satellite.

From 1933 to 1945 Manchuria was in the hands of the Japanese. In June

of 1941 Germany invaded the Soviet Union. By 1943 the U.S.S.R. could no longer afford to keep its garrisons in Sinkiang and withdrew them which gave Chiang Kai-shek the opportunity to replace them with his Nationalist forces. But the Kuomintang lacked the forces to effectively attach Sinkiang to China.

By the Cairo Declaration of November 1943 Roosevelt and Churchill promised Chiang Kai-shek the return of all territories that China had lost to Japan (i.e. Manchuria, Formosa, and the Pescadores), but at Yalta in February 1945 the United States, and Britain agreed to the Soviet Union being granted a lease on Port Arthur, a recognition of the U.S.S.R.'s pre-eminent position in Dairen, and the operating of the Chinese Eastern and South Manchurian railways by a joint Sino-Soviet Company; this was all dependent upon a Sino-Soviet treaty however. The latter was signed on the day the Japanese surrendered (August 14th 1945). By this treaty the U.S.S.R. recognised China's sovereignty over Sinkiang and Manchuria and Port Arthur became a joint naval base, Dairen a free port and China agreed to recognise the independence of the Mongolian People's Republic if the Mongols expressed such a desire in a plebiscite.

The coming to power of the Chinese Communists in 1949 changed radically the position along the Sino-Soviet borderlands. In 1950 Mao visited Moscow and the old treaties were abrogated and new agreements signed. The Chinese were determined to integrate Manchuria and Sinkiang into the People's Republic. By 1955 all Soviet troops and interests in Manchuria had been withdrawn and culminated. In that year the transfer of Soviet shares in Sinkiang joint companies began so that the latter province came fully under the control of China. Since they established control of Sinkiang the Chinese Communists have been encouraging large scale immigration

into their far western province. For the first time in a number of decades Sinkiang and Manchuria are firmly under the administration of Peking.

In this study the Mongolian People's Republic (Map I) and its boundary area with China is dealt with later in Section Seven. Therefore the Sino-Soviet boundary is to be found on either side of the Sino-Mongolian boundary. For the sake of convenience the Sino-Soviet boundary is here dealt with in two parts, namely that to the east of the Mongolian People's Republic (Map 2) and that to the west (Map 3). The eastern, or Manchurian, boundary was the outcome of the Treaties of Nerchinsk (1689), Aigun (1858), Peking (1860) and that of 1911 which fixed precisely the line from Tarbaga Dag to the confluence of the Argun with the Amur River. The western, or Sinkiang, boundary owes much to the Treaties of Peking (1860), Tarbagatai (1864), St. Petersburg (1881) and that between Russia and Great Britain in 1895 on the Pamir region. From a study of Soviet and Chinese Communist maps there appear to be some boundary discrepancies, notably in the Pamir area of Sinkiang and in the region of the Argun River in Manchuria.

The Far Eastern boundary (Map 2) between the Soviet Union and China is mainly delimited along physical features, notably the Amur River and its tributaries the Ussuri and Argun. The line stretches for 2,000 miles from the Pacific coast south of Vladivostock to the hills of Trans-Baikalia. Beginning in the western portion of the boundary the Argun River divides the Chita Oblast of the U.S.S.R. from China's Inner Mongolian Autonomous Region (Map 1) for 600 miles or so. Where the Argun joins the Shilka the Amur comes into being (Map 2) and forms the boundary for the next 1,000 miles. From the middle Argun to the Amur the border area is made up of an upland plateau sparsely populated and which finishes to the east in the Great Khingan Mountains. The Amur flows across the Great Khingan in an easterly

and south-easterly direction after which the uplands decrease in height. The increasing influence of the Pacific leads to a slow change from the dry, higher steppelands to the greener areas to the east where summer rainfall is heavier.

The Chinese side of the Amur is higher than that of the Soviet bank. The 3,000 foot peaks of the Little Khingan extend towards the Pacific as far as the Sungari River. On the Soviet side near the Zeya River the uplands disappear in a northerly direction to leave the Zeya-Bureya Plain which is an important granary in an otherwise predominantly highland border region. The administrative centre of the Amur Oblast (the political divisions are given in Map I), is Blagoveshchensk and is located on the Plain. The Plain narrows towards the southeast, confining the Amur. Here the Little Khingan Mountains of the Chinese side meet the Bureya Range which reach heights of over 6,000 feet. Beyond this narrow area the waters of the Amur are increased by the Sungari and later the Ussuri Rivers. The Amur flows across a wide plain which is poorly drained and farmed only on the higher areas. To the east of the Bureya Range there is the Khabarovsk Krai of the Soviet Union, and between the mountains and the mouth of the Ussuri Birobidzhan, which is the Jewish Autonomous Oblast set up in the 1930's, and which has a present population of about 165,000 people, most of whom are not Jewish.

Within the Chinese Province of Heilungkiang the area from the Little Khingan to the Ussuri is poorly drained and sparsely settled, notably along the Sungari River. It is a region of improvement planned by the Peking regime. Further south the Manchurian Plain often has densities of over 400 persons per square mile.

At the meeting of the Ussuri and Amur Rivers the boundary changes direction with the latter flowing northeastwards past Khabarovsk (population

of about 350,000) which is the chief city of the Soviet Far East. Some twenty or so miles north of Khabarovsk the Amur River is joined by a branch of the Ussuri named the Kazakevicheva. Chinese cartographers include the flat and uninhabited lands between the Kazakevicheva and the main course of the Ussuri as within China, whilst Soviet maps claim them as within the Union. The boundary follows the Ussuri River to Lake Khanka after which it crosses the northern portion of the Lake to turn in a southwesterly direction through a number of low ranges to terminate inland a little way from the coast. From this point the Soviet Union shares a short boundary with the Korean People's Republic to the Pacific.

Within the U.S.S.R.'s Maritime Krai to the east of the Ussuri there are the low and heavily wooded hills of Sikhote Alin which runs parallel to the coast from the mouth of the Amur to Vladivostock. The main centre of settlement for Maritime Krai is on the Lake Khanka Plains. There are small fishing villages along the coast and a number of military establishments. On the other side of the Ussuri the Nadan Khada Alin Range of Manchuria separates the Sungari valley from the Ussuri and the Lake Khanka Plains. The Range is a continuation of the highlands of eastern Manchuria which dominate the Chinese-Soviet-Korean border region.

Up until the Nineteenth Century the lands on either side of the Amur were inhabited by primitive tribes which included Paleao-Asiatics like the Gilyaks and various groups belonging to the Manchurian-Tungus family such as the Manchus. Their economy was based on hunting, fishing and trapping, whilst to the west of them starting in the Great Khingan Mountains there were Mongolian ethnic groups surviving by pastoral nomadism. This has changed much since the last Century; as has been stated the Russian advance stimulated Chinese counter-measures based on mass immigration into these lands

at the end of the Nineteenth Century and during the first years of the Twentieth Century. The 2 million Manchus on the Chinese side of the boundary have been culturally assimilated by the Han and have no, or little, cultural or ethnic difference from the majority of the population of the People's Republic, even speaking the Chinese language. The Mongols of the Great Khingan region are still culturally distinct, but of modest numbers (about 350,000) and notably since the Sino-Soviet ideological dispute greater efforts have been made to impose the boundary upon their lands and turn them into settled communities.

In the Far Eastern border region the Chinese have a distinct advantage over the Soviet Union in their efforts to absorb the lands up to the boundary. The Chinese border areas of Inner Mongolia, Heilungkiang and Kirin had a population in 1957 of 36,610,000 persons⁴ whilst it seems unlikely that the U.S.S.R.'s borderland total is more than about $4\frac{1}{2}$ million people. The water-logged soils, short growing season and permafrost of the Soviet Far East inhibit farming development. Water and forest resources are impressive, but the iron ores used at Komsomolsk for steel are low grade and the coal not particularly good for coking purposes. Soviet efforts to introduce industry have been poorly rewarded and the million acres of virgin land brought into agricultural use in the mid-1950's did not respond well and proved unsuited to farming in many areas. Soviet settlement in the Far East is dominated by the Trans-Siberian Railway network.

The Chinese have successfully brought their borderlands within the Soviet Union in the Far East within the political administration of the state, the method employed being large scale Chinese immigration into the region so that the minority groups have been culturally absorbed. Similarly, since the

4. Encyclopaedia Britannica World Atlas; University of Chicago Press 1961, p.153.

deterioration in relations between China and the Soviet Union the boundary line has been functioning as a strict political division with no free movement across it. Chinese immigration into, and development of, the border region continues with a vigour which contrasts with the lack of the success of the U.S.S.R.'s attempts on the other side.

The Soviet Union has not successfully integrated the Far Eastern possessions into the state unit. Notably since the Sino-Soviet dispute Moscow has been aware of the Chinese territorial challenge, but can claim little success in the attempts to fill a few of the empty spaces. At least half the population of the Soviet Far Eastern borderlands is urban which makes the emptiness of the countryside even more apparent. The boundary provides a geographical division in the landscape, but between the populated Chinese lands and the unpopulated Soviet territories.

The Inner Asian Section of the Sino-Soviet boundary stretches from the Pamir Mountains of the south to the Altai ranges of the northern section (Map 3). On the western side are the Soviet Republics of the Tadzhiks, Kirgiz and Kazakhs, plus a little of the Gorno-Altai Autonomous Oblast, whilst the Chinese section consists of the Sinkiang-Uighur Autonomous Region.

The Pamir plateau according to Chinese maps has yet to be delimited between the Soviet Union and the People's Republic. The Pamirs themselves reach heights of the order of 18,000 feet. The Soviet section lies within the Gorno-Badakhshan Autonomous Oblast which is a subdivision of the Tadzhik Soviet Socialist Republic. The Tadzhiks are ethnically related to tribes found in both Afghanistan and Iran. The Tadzhik Republic has a population of 2 million, but this is concentrated to the west and the Pamir Plateau is sparsely populated. On the Chinese side of the boundary there is the Tash Kurghan Tadzhik Autonomous Hsien which is an ethnic subdivision of Sinkiang. The in-

habitants are Sarikola Tadzhiks following the Ismaeli Moslem faith which is led by the Aga Khan, and representing a dissident minority within China.

North from the Pamirs the Sino-Soviet boundary crosses the Trans Alay Mountains, beyond which there is an upland valley which is the land of the Kirgiz nomads divided between the Kirgiz Soviet Socialist Republic and China's Kirgiz Autonomous Chou. Where once the Nomads were permitted to range freely across the boundary since the Sino-Soviet dispute efforts have been made to settle the Kirgiz on each side of the line.

After the upland valley the boundary moves eastwards into the Tien Shan (Map 3) where it follows mainly the Kokshaal Tau crestline. Unlike the Sino-Soviet Far Eastern boundary the Inner Asian borderline does not favour so frequently physical features in its delineation, often it is an arbitrary line which had been drawn on a map. The Tien Shan runs from east to west for over 1,900 miles and is composed of a collection of geologically diverse ranges containing small valleys. The highest peak is found in the Khan Tengri Mountains and is at 23,000 feet and is in the Sino-Soviet boundary area. On the Soviet side the Tien Shan is mainly within the Kirgiz Republic, whilst in China Owen Lattimore⁵ felt that the Mountains constituted the key to Sinkiang. The Tien Shan divides Sinkiang into two parts with Dzhungaria in the north and the Tarim Basin in the south (Map 3).

The Tarim Basin is a region of drought due to the mountain barriers of the Pamirs in the west, the Tien Shan in the north and the Kun Lun in the south. However, at the base of the mountains there are oases fed from mountain streams such as those settlements of Khotan and Yarkend near the Kun Lun and Aksu at the base of the Tien Shan. The water problem limits nomadism to

5. O. Lattimore: 'Inner Asian Frontiers of China'; Beacon Press edition, Boston 1962, p.151.

the uplands, but includes such important cattle breeding groups as the Tadzhiks and Kirgiz. Within the oases the main ethnic group is the Uighurs who are a Turkic people. The Chinese in the Tarim Basin are of limited number and mainly military or administrative personnel. Peking has an ambitious road and rail building plan for Sinkiang in order to both exploit the economic resources of the Province and to establish more effectively the rather tenuous authority of the central government.

The Ili River (Map 3) marks the corridor zone of Inner Asia. To the north of the Tien Shan a greater rainfall has clothed the slopes of the mountains with good pasture which provided an easy routeway for nomadic invaders such as the Mongols in the Thirteenth Century. Where the boundary crosses the Ili River Valley is perhaps the militarily most vulnerable section of the Sino-Soviet borderlands. The Ili Valley is limited by mountains in the east, but widens in the west. Alma Ata to the south of the Ili is the capital of the Kazakh Republic and has a population of about half a million people, most of them Russians. The Chinese Ili area has been organised into the Sibo Autonomous Hsien; the Sibo are a Tungus-Manchurian tribe numbering about 20,000, but associated with the Uighurs and sharing their Turkic culture.

North from the Ili River the boundary follows the east-west line of the Ala Tau Range which has heights up to 15,000 feet, using the crestline as a political boundary, after which the boundary comes down into the depression known as the Dzhungarian Gate. This routeway was selected for the first Inner Asian line linking Moscow to Peking before the deterioration in Sino-Soviet relations. The boundary crosses steppe beyond the Barlik Maili Mountains to the north of the Dzhungarian Gate. At the Tarbagatai

Mountains the boundary turns eastwards to follow the crestline of the eastern half of the Range at about 9,500 feet, after which it crosses the valley of the Black Irtysh River which rises in the Mongolian Altai. The Black Irtysh was an important routeway for transporting minerals from Sinkiang to the U.S.S.R.

The Basin of Dzhungaria occupies 270,000 square miles and is bounded in the northeast by the Mongolian Altai and in the south by the Tien Shan. Rainfall is about 8 inches in the lowlands and a little more on the higher ground. It is a region of pastoralism. 'Most of the 475,000 nomadic Kazakhs of Sinkiang live in the western uplands of Dzhungaria. In past times of crisis, the Kazakhs freely migrated back and forth from Russian to Chinese territory. Thus, the Sinkiang Kazakhs share a common history, as well as a common Turkic language with the Russian Kazakhs'.⁶ The freedom of movement once enjoyed by the Kazakhs is no more and so a modification of the Kazakh culture on each side of the boundary can be expected. At present the Kazakhs are Moslems. There are also Mongol nomads throughout Dzhungaria, although mainly in the Tien Shan and near the border with the Mongolian People's Republic. The Mongols are Lama Buddhists. The Kazakhs and Mongols have been given minority status by the Chinese. Also Dzhungaria has about a quarter of a million Dungans (Chinese Moslems). Chinese immigration into the area has been encouraged so that perhaps a million have arrived from the east during the last few years. Urunchi is now an industrial city of 200,000 people.

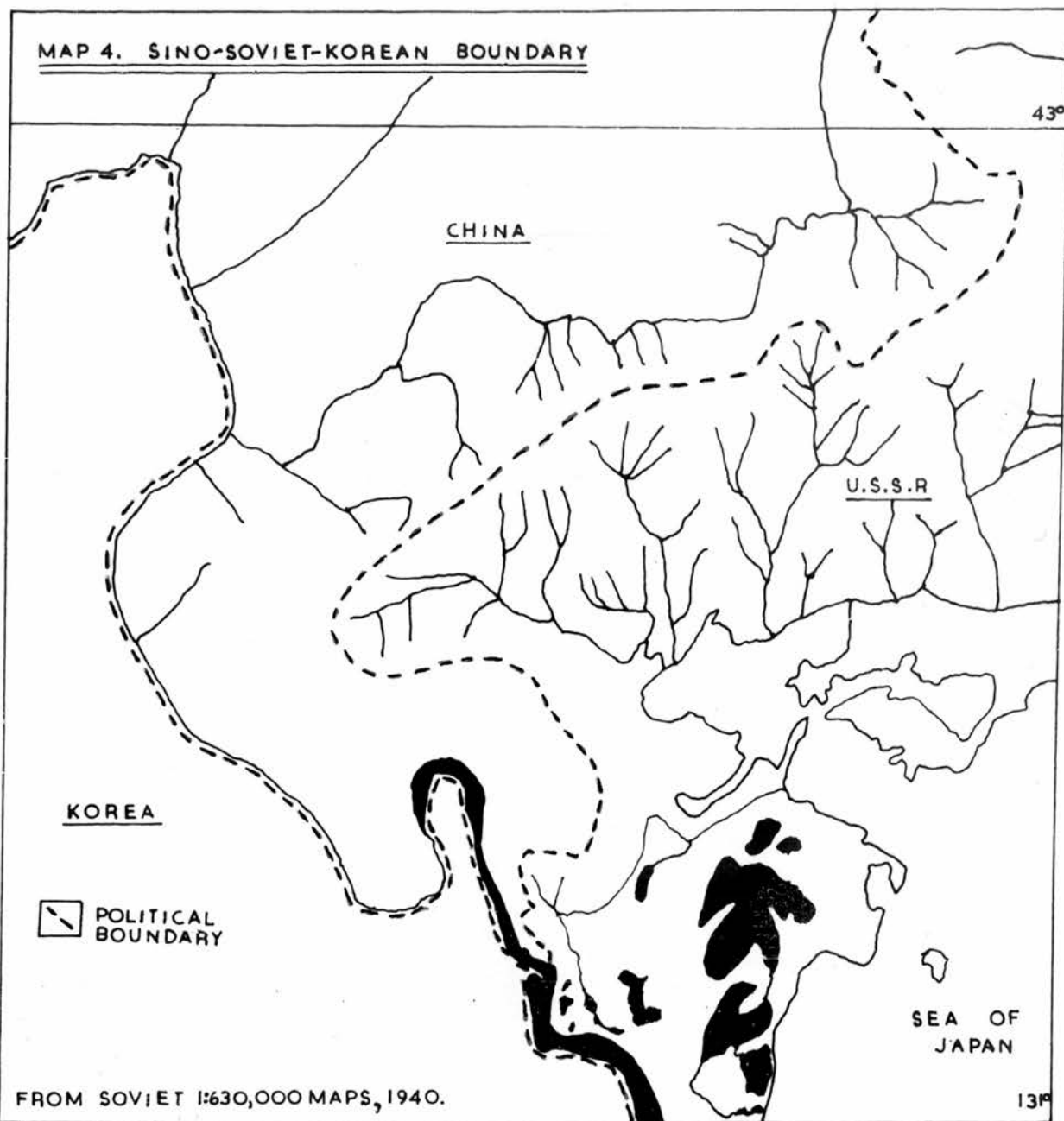
There is a striking contrast between the Far Eastern Sino-Soviet boundary and the Inner Asian one for the Chinese and Soviet positions are reversed in the two. Soviet Central Asia has had forty years of Communist

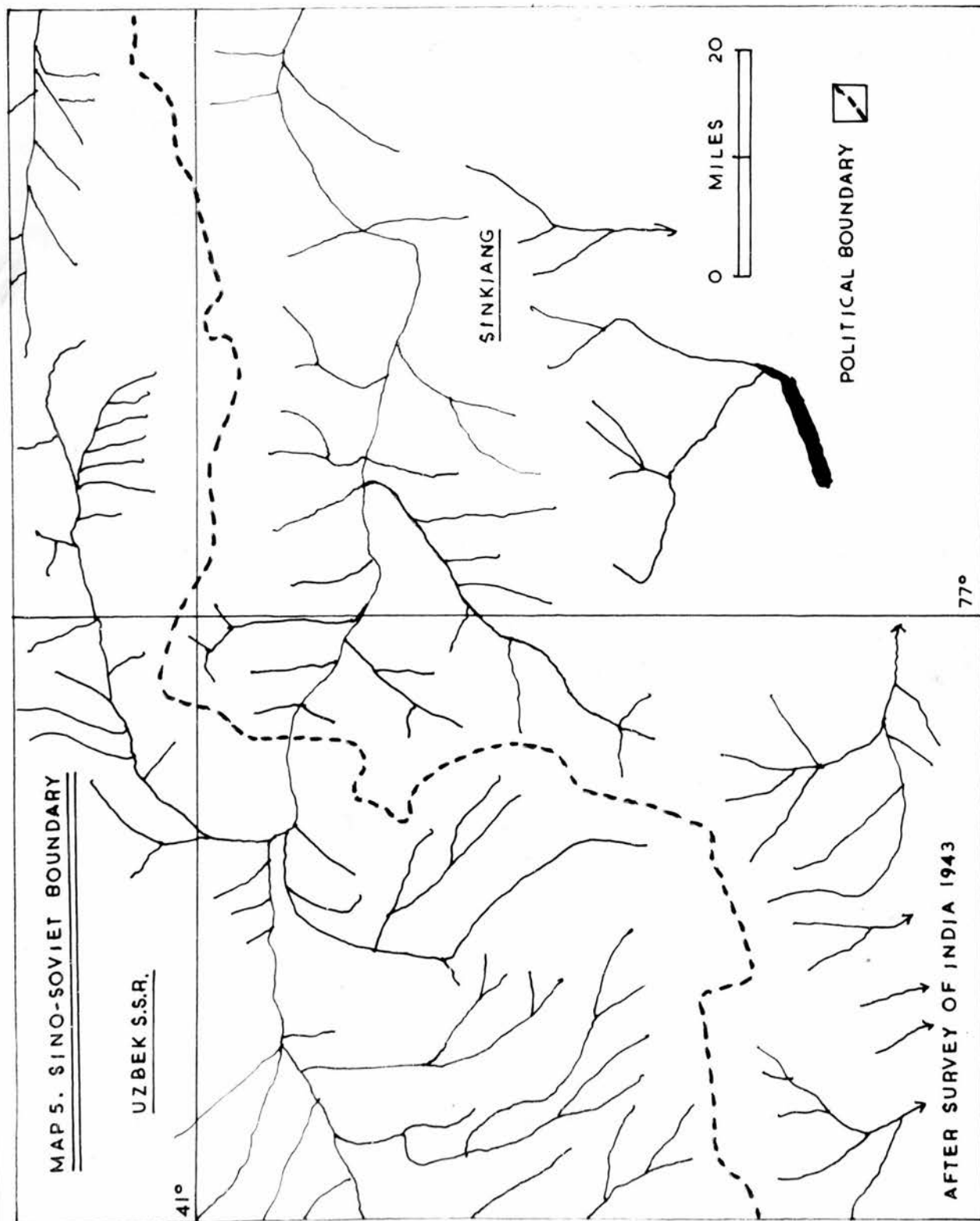
6. W.A.D.Jackson: 'The Russo-Chinese Borderlands'; Van Nostrand, Princeton 1962, p.11.

government and has been carefully integrated into the political unit. Chinese development in Sinkiang has only just begun. There are 12 million Turkic peoples and 7 million Slavs in Soviet Central Asia as against 4 million Turkic peoples and $1\frac{1}{2}$ million Chinese in Sinkiang. During their forty years of rule the Communists in Soviet Central Asia have wiped out any separatist feelings amongst the minorities and neutralised the once challenging hold of Islam. Agriculture has been collectivised and even before the Sino-Soviet dispute much headway had been made in eliminating nomadism. Soviet Central Asia has been a centre for putting into effect the plans for ploughing virgin lands so that the immigration of Russian and Ukrainian farmers continues at the expense of the Kazakh nomads who are thereby forced to conform. The Sino-Soviet boundary in Inner Asia makes an effective divide in the human geography of the region, but whereas the U.S.S.R. has integrated her areas into the Soviet political unit China can make no such claims for Sinkiang where the state has experienced great difficulty with many of the minorities ranging from the religious animosity of the Dungans to the racial feeling of the Turkic Uighurs. Soviet Central Asia is as racially diverse as Sinkiang, but in the former the distinctive cultures have been neutralised whilst in the latter they are still a dominant factor.

The Far Eastern Sino-Soviet boundary area shows the Chinese dominant with the Soviet lands sparsely settled and underdeveloped in comparison. On the Chinese side of the border the minority groups such as the Manchus have been culturally absorbed by the Han peoples and the political administration of Peking successfully imposed right up to the boundary. The Mongols, tenacious of their way of life, are perhaps the last to survive the efforts of Chinese assimilation, but this is a forlorn cause. The bound-

MAP 4. SINO-SOVIET-KOREAN BOUNDARY

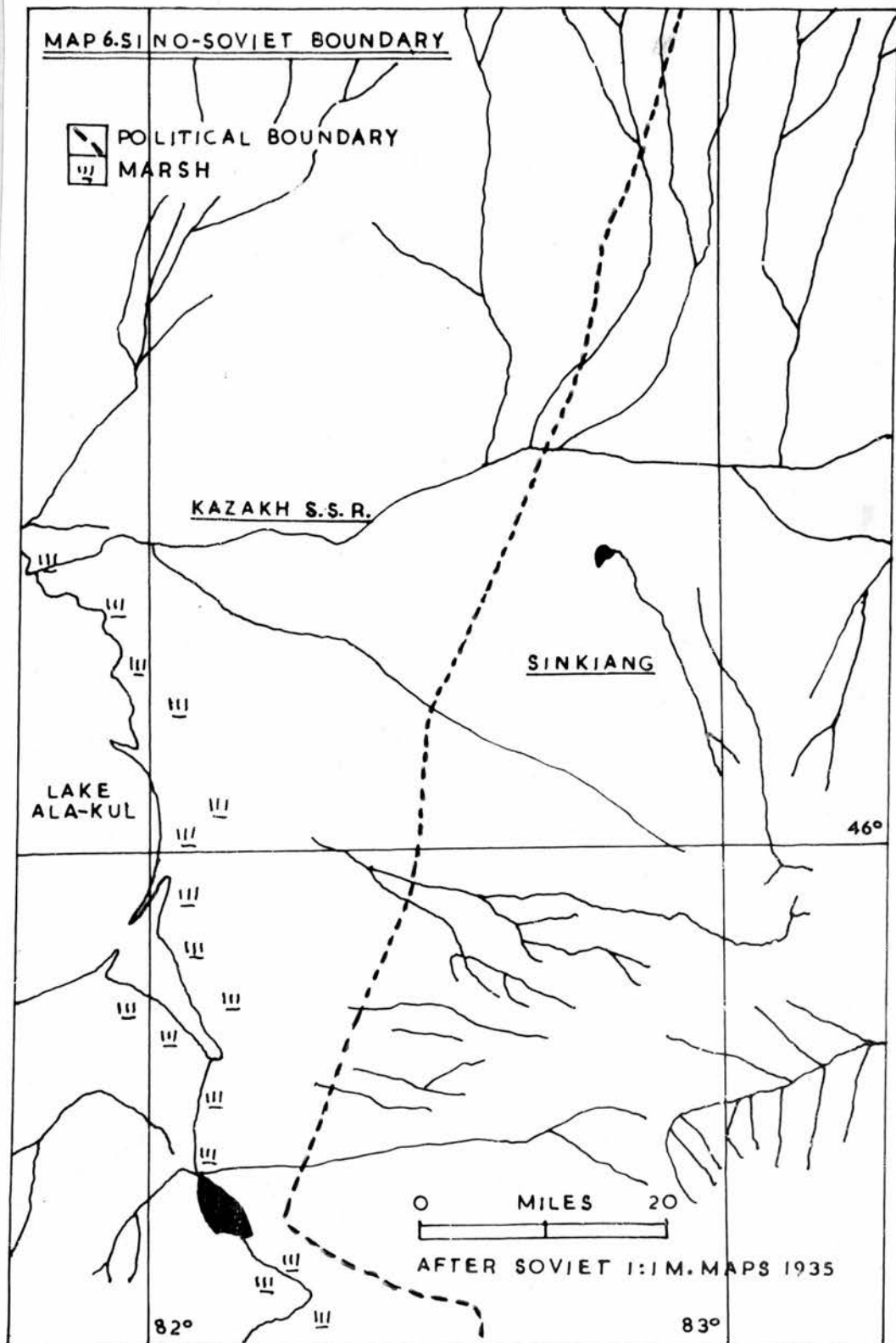




MAP 6. SINO-SOVIET BOUNDARY



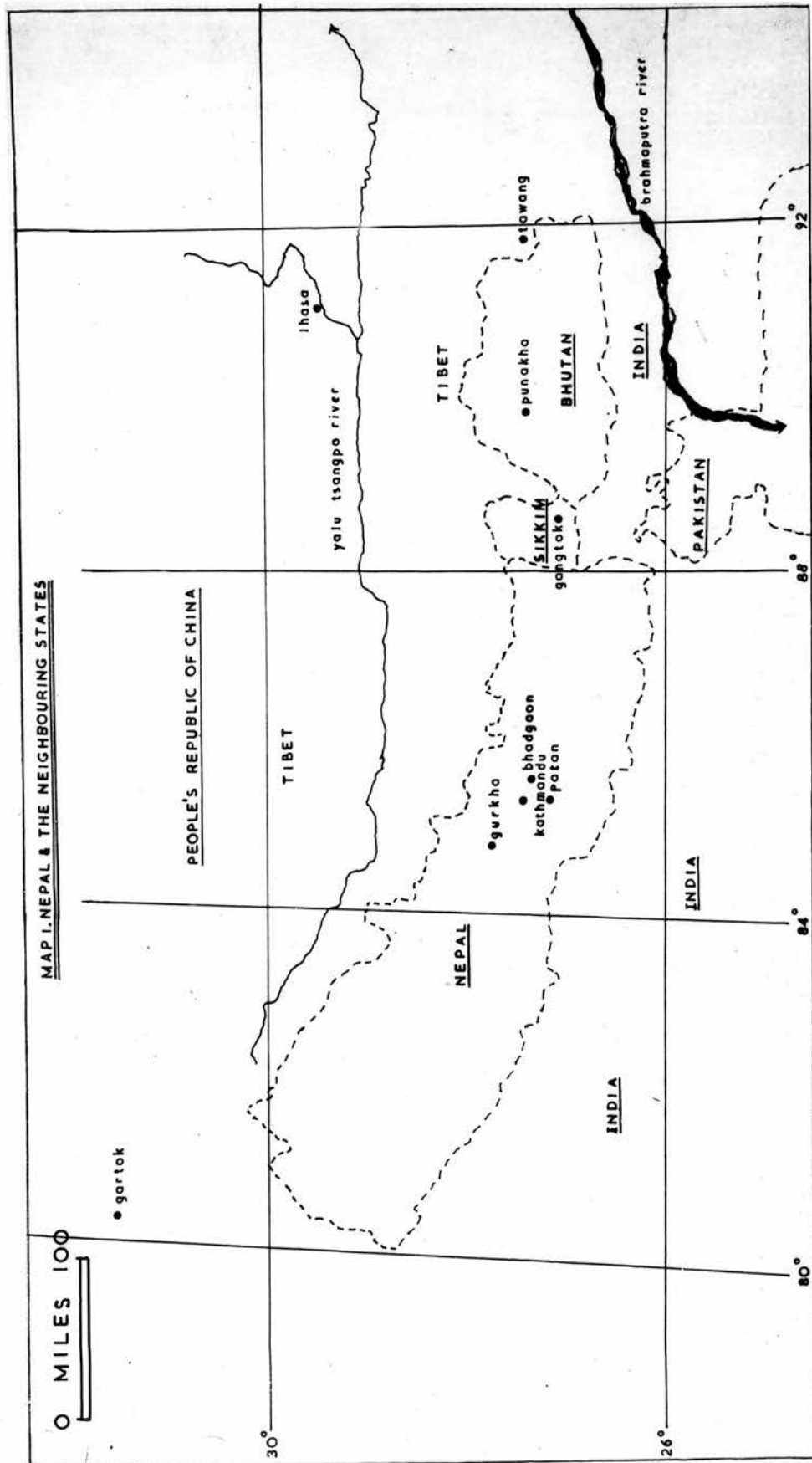
POLITICAL BOUNDARY
MARSH



ary at present makes an effective divide within the human geography of the border area, but only as long as China respects it; it is doubtful if the Soviet Union could stop a spill over of Chinese into her empty of lands of eastern Siberia unless she contemplated a drastic retaliation. In the region of the Far Eastern boundary China dominates the situation through the far greater numbers of Han than Russians, and her control of the territory within her jurisdiction.

In conclusion a contrast in boundary delimitation between the eastern and western Sino-Soviet lines can be seen. The eastern boundary is delimited mainly along rivers with the exception of the area of the Sino-Soviet-Korean meeting (Map 4) where a water-shed-crestline boundary comes into being. The eastern Sino-Soviet boundary is therefore within Boggs' 'Physical' category or Hartshorne's 'Subsequent'. The western section is partly Boggs' 'Physical' type of boundary (Hartshorne's 'Subsequent category' Map 5), but also much of it consists of an arbitrarily drawn line which Hartshorne would have classified as a 'Pioneer Antecedent' boundary (Map 6), or Boggs' 'Geometric'. As two sorts of boundary line have been used in delimiting the western Sino-Soviet border it is what Boggs refers to as a 'Compound' boundary.

MAP I. NEPAL & THE NEIGHBOURING STATES



SECTION FOUR: NEPALMinor Neutralist Borderland

1

CHAPTER ONE: Historical Development.Pre-Nineteenth Century

Nepal is a landlocked state (Map I) dominated by the Himalayas and surrounded by the two ancient cultures of India and China. Nepal is faced by a number of the problems which perplex those states within the Minor Neutralist category of border country so that, despite other characteristics of a more unique quality, it makes a useful example for studying in greater detail. In many ways Nepal resembles closely Tibet, Sikkim and Bhutan; the area has been a refuge zone for peoples from China and India, and each have accepted and modified the cultural offerings of the surrounding civilisations.

The early history of Nepal is shrouded in mystery, but it seems probable that at the birth of the Gautama Buddha in 563 B.C. at least the Valley of Katmandu was well populated. Before the birth of Christ Buddhist culture flourished in much of the area now known as 'Nepal'. But the history of Nepal has been dominated by the Valley of Katmandu which was first developed by a people known as the Newars. They organised the agriculture of the area and later adopted the Buddhist faith which they modified and elaborated. The early history of Nepal is dominated by cultural borrowings from the south.

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1. The following texts have been particularly useful in this chapter: G.S.Bajpai: 'Nepal & Indo-Nepalese Relations'; Indian Yearbook of International Affairs for 1954; J.H.Elliott: 'Guide to Nepal', Newman, Calcutta 1959; A.Gupta: 'Politics & Elections in Nepal'; The Political Quarterly Vol.30, 1959; G.Jain: 'India Meets China in Nepal'; Asia Publishing House, London 1959; P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms', Van Nostrand, Princeton 1963; & H.M.Vinacke: 'A History of the Far East in Modern Times', Allen & Unwin, London 1960.

According to Bana's 'Charita Harsha' the Indian ruler Sri Harsha invaded the Valley of Katmandu in 607 A.D., but his governor was later defeated by a Nepalese army under Prince Amsuvarman. Amsuvarman came to power in the first quarter of the Seventh Century A.D., and later took the title of 'King of Kings'. The new Dynasty was established at the time when Tibetan power was dominating the Himalayas and Nepal was made a vassal state. Historical facts are again uncertain at this period but it would seem that Nepal remained a vassal of Tibet until the Eighth Century A.D. There were internal power struggles and political intrigue and although the Valley of Katmandu remained the cultural core of Nepal what is now the present area of the state disintegrated into a number of small kingdoms. The Tibetan claim to vassalage ceased in 703 A.D. (except for some of the northern principalities which were paying tribute to the Ch'ing Emperor as late as the Eighteenth Century), and the tiny states of Nepal entered upon a long period of stagnation.

The arrival of the Moslem religion in Northern India in the Thirteenth Century led to the fleeing of many of the Hindus to Nepal. A number of small Hindu kingdoms were established in southern and western Nepal. Some refugees of Rajput origin settled around Gurka (Map I). During the Eighteenth Century the Rajputs consolidated their power around the centre of Gurkha. At this time the all-important Valley of Katmandu was divided into the three principalities of Katmandu, Bhadgaon, and Patan (Map I). In 1769 the Gurkha leader Prithwi Narayan managed to bring the Valley of Katmandu under his rule and inaugurated a period of Gurkha empire building which was to challenge the Sikh power to the west, the British East India Company to the south, and

2. Quoted by P.P.Karan: 'Nepal'; University of Kentucky Press, Lexington 1960, p.4.

China and Tibet to the north.

Having consolidated their position in Nepal the Rajputs broke off the northern territories' tribute payments to China and Tibet and in 1789 made their first attack into the latter. In 1791 the Lhasa administration refused to provide the balance of an indemnity promised the Nepalese by the Tibetan authorities at Tashilhumpo. The reason for the refusal on the part of Lhasa is thought to have involved Tibet's domestic politics in that Tashilhumpo was a centre of rising Lamaist influence and the denial of aid by Lhasa led to the expected reaction of the Nepalese with renewed invasion and the plundering of the rival Tashi Lama's monastery. Having watched the power of Tashilhumpo crushed by the Gurkhas Lhasa requested aid of the Chinese Emperor.

China's alien Ch'ing (Manchu) Dynasty gained much from the support given to it by the adherents of the Lamaist religion in Tibet and Mongolia, and so an appeal from Lhasa was not to be taken lightly. Following a role as protectors of the Lamaist interests in Tibet the Manchus dispatched an army which decisively defeated the withdrawing Nepalese in 1792. In the Sino-Nepalese treaty which followed the Gurkhas had to return their plunder and agree to a tributary mission to Peking every five years. Whilst the Chinese did not bother to extend their control in Nepal as they had done in Tibet there is little doubt that the Gurkha Government was considered a vassal of the Celestial Empire.

If Peking considered Katmandu part of the Ch'ing dominions what was the attitude of Nepal towards China at this time? At the beginning of the Nineteenth Century Mir Izzut Ullah³ informed William Moorcroft, a Bengal Govern-

3. A.Lamb: 'Britain & Chinese Central Asia'; Routledge & Kegan Paul, London 1960, pp.38-40.

ment veterinary surgeon, that the Rajah of Nepal had appealed to the Chinese Emperor for protection should the British East India Company attack his territory. This suggests that the attitude prevailing in Katmandu was the same as that in Lhasa. As befitted their role the Manchus are reputed to have answered favourably to the Nepalese request and enquired what resources the Rajah might need.

Nineteenth Century

With a certain inevitability the expansion of Gurkha power to the south after its frustration in the north led to conflict with the British East India Company. Hostilities began in 1814, and during the war the British captured a draft of a letter from Katmandu to the Chinese Emperor requesting the Manchus to send an army into Bengal to create a diversion and so provide military pressure to relieve the onslaught on the Nepalese armies. A Treaty between the East India Company and Nepal was signed on November 28th 1815 at Sugauli by which the Gurkhas lost their position in Sikkim and territory around Kumaon, and Garwhal, and all land gained west of the Kali River (which today marks the western side of the Nepalese oblong). Katmandu was to have a British Resident. What is of particular interest is that Nepal was not added to British India as it was considered a Chinese sphere of influence, and a counter-offensive from Peking was feared.

Both Nepal and the British East India Company waited with apprehension for the Chinese reaction to the Celestial Empire's exclusion from the negotiations which preceded the Segauli Treaty. Would the Ch'ing Emperor repeat

3. A.Lamb: 'Britain & Chinese Central Asia'; Routledge & Kegan-Paul, London 1960, pp.38-40.

the Chinese action of 1792 when an army of 70,000 men had been led by General Fu Kang'an against the Gurkas? But the power of the Manchus had already begun to lose its effectiveness and the only Chinese move was a polite request to abandon the Katmandu Residency. The Chinese still thought of Nepal as a vassal state, but lacked the power to operate against the British threat at such a great distance from Peking.

From 1804 to 1837 Nepal was guided by a Prime Minister of impressive ability, namely Bhim Sen. His policy rested on the belief that the Nepalese military ambitions should be directed against the British, and that any territorial expansion should be at the expense of India. China was considered of far greater power and significance than the British, and the wily Premier concluded that the Manchu overlord must not be upset by Nepalese invasions into Tibet, nor by too friendly Anglo-Gurkha relations. Hardly had the Segauli Treaty been signed than Bhim Sen was conspiring with the Chinese to expel the British Resident from Katmandu. Bhim Sen was only too aware of the threat of peaceful British penetration, and so the British Resident was restricted in his movements to the Nepalese capital. In 1837 Bhim Sen was disgraced and retired into private life; the machinations of the mentally unstable monarch led to the suicide of the ex-Prime Minister in 1839.

The fall of Bhim Sen left Nepalese foreign policy full of indecision. After 1837 the Gurkhas could not decide whether to follow a hostile line against the British, or adopt a pose of strict neutrality. But the attitude towards China did not change as the Nepalese still considered themselves Manchu feudatories to the extent of offering their services to the Ch'ing Emperor during the Sino-British conflict of 1840-42 (the Opium War); Nepalese assistance was declined by the ever proud Chinese.

In 1845 Jang Bahadur became Prime Minister of Nepal and the administration took on a distinctly pro-British appearance. The defeat of the Chinese at the hands of the British in the Opium War had a considerable effect on the outlook of the Nepalese, and from this period British prestige and influence increased at the expense of the Chinese. In 1850 Jang Bahadur visited Britain.

Despite a decline in the respect accorded the Chinese the Nepalese continued to send their Tribute Missions to Peking every five years, mainly because they proved to be profitable, but also due to the Gurkha belief that even if China was no longer the dominant power in the Himalaya region she was not to be taken lightly. The 1852-54 Mission was badly treated in both China and Tibet. Taking advantage of Chinese preoccupation with the Taiping Rebellion the Nepalese used the excuse that their ~~nations~~ of the Tribute Mission had been badly treated in Lhasa to attack Tibet. In March of 1856 the Tibetans agreed to pay the Nepalese an annual tribute of 10,000 rupees (a practice which was finally ended by the Chinese Communists in 1953), abolished customs' duty on Nepalese goods, and acknowledged the right of Katmandu to have a representative in Lhasa to look after the interests of the Nepalese traders. On April 1st 1856 the Nepalese commenced their withdrawal from Tibet. The situation with regard to Chinese power in the area of the Himalayas had changed radically from what it had been sixty years before.

In 1856 Jang Bahadur resigned and in recognition of his services King Surendra Vikram Sahi bestowed upon him the title of Maharaja and made the Nepalese Premiership hereditary to his family (the Ranas). But Jang Bahadur's retirement was brief and he was recalled to office in 1857 where he implement-

ed a policy of assisting the British to crush the Indian Mutiny with the aid of 12,000 Nepalese troops. For this action he was made a Grand Commander of the Order of the Bath and some of the territory ceded to India in 1815 along what is now Uttar Pradesh and Bihar was returned to Nepal.

But China had not faded completely into the background. Even if the Nepalese no longer shared the Chinese opinion of the lowly vassal status of the Katmandu Government profit demanded that they send another Tribute Mission to Peking in 1866. This journey was looked upon as a trading venture as it carried opium for sale in China. The Mission did not return to Katmandu until 1869 after it had been made to feel fully its tributary position by the Chinese.

In order to try and counteract the effect of the honours conferred upon Jang Bahadur by Queen Victoria the Emperor of China in 1872 granted the Nepalese Premier the Celestial Empire's most distinguished award of the 'Double-eyed Peacock Feather' and the 'Sable Coat'. In 1877 the first hereditary Prime Minister of Nepal died, having dedicated much of his service to creating an outlook sympathetic to British interests along the northern borders of India. From this time until 1951 the power of the Kings of Nepal was secondary to that of the Premiers, none of whom were particularly admirable, working in the interests of the nobility and against the bulk of the population. Efforts were often made to depose the Rana family from its dominant position within Nepal, Premier Ranaudip Singh being assassinated in 1885 and Prime Minister Bir Shamsher Jang Bahadur having two attempts made on his life before he died somewhat more peacefully in 1901.

In 1890 China acknowledged Britain's interests in Sikkim by treaty, an action which was followed in 1893 by an agreement regulating trade between India and Tibet. The 1895 throwing off of Chinese suzerainty by the

Tibetans and the latter's refusal to recognise the Sino-British treaties was followed in 1902 by Tibetan raids into Sikkim. Nepal endeavoured to act as mediator between Tibet, Britain and China in these matters. The 1904 Younghusband expedition to Lhasa had a yak supply column provided by Nepal. With the conclusion of hostilities Nepal had earned the gratitude of Britain, and the Prime Minister was decorated by the Chinese.

Twentieth Century

It took the British a long time to grasp the full significance of the Nepalese Tribute Missions to Peking. It was not until 1895 when the British examined the whole system that the Missions were condemned as a sign of vassalage. British slowness can be partly blamed on the fact that until 1895 China's actual power was a mystery, but in that year the Japanese demonstrated fully the decay of the Ch'ing Empire and the British no longer felt a need to conciliate the Chinese. By the end of the Nineteenth Century Nepal considered herself an independent and sovereign state, but this view was not shared by China. In 1908 the Nepalese Premier Chandra Shamsher visited Britain and confirmed the independent status of his country, but a similar visit to Peking would have been worthless. In the same year the last Tribute Mission left for China. 'Chinese Olympian pride and arrogance had always maintained that these friendly communications represented the tribute paid by a vassal to its lord ... It has of late years been brought home to the world at large that Chinese arrogance has not lessened and that her claims to suzerainty over lands that never were hers or never had more than an exchange of courtesies with her, are still being pressed.'⁴ Both

4. F.Tucker: 'Gorkha'; Constable, London 1957, pp.190-191.

China and Nepal tended to misinterpret the Missions; whilst China continued to view them for what they had been in the 1790's, namely the representations of a state conquered by her armies, Nepal looked upon them as business ventures.

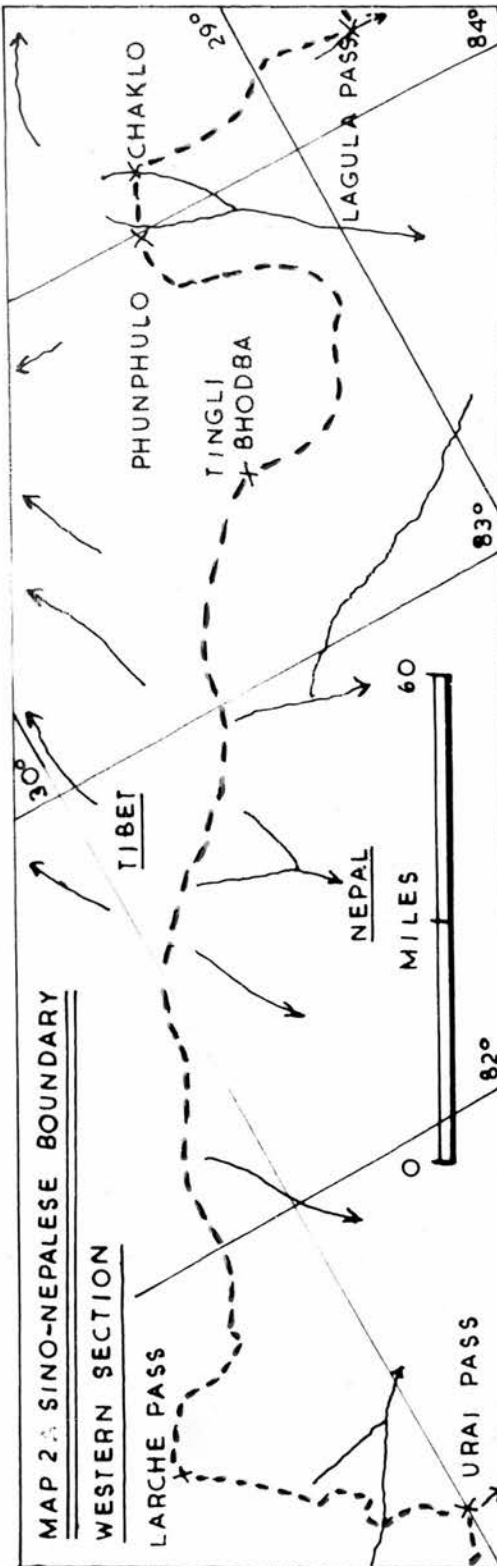
In 1909 P'u Yi, a child of two years, was proclaimed Chinese Emperor with the name Hsuan T'ung. Under the Regency the Manchus had an inglorious last fling occupying Rima in Tibet and advancing into the Mishmi country of the North East Frontier Agency of India. In 1910 Nepal was officially proclaimed a vassal of the Chinese Empire. By the following year the opposition to the Manchus in China was irresistible and in 1912 the Emperor abdicated.

The fall of the Ch'ing Dynasty did not bring about the sort of reformation the more enlightened elements in China had worked for. The situation quickly took on the appearance of being just another example of the roughly three hundred year cycles of rising and declining dynasties. China degenerated at the hands of corrupt and greedy men, both native and foreign. At the end of the First World War the foreign powers decided to replace the idea of territorial partition with regard to China by a more sophisticated form of exploitation based on international finance. The hopes of such idealists as Sun Yat-sen were frustrated, with China split once more into North and South. In this age of the petty warlord China's foreign policy revolved around the demands of such states as Japan, Britain and France. There was little opportunity for a weak China to present her opinion on such matters as the status of Nepal.

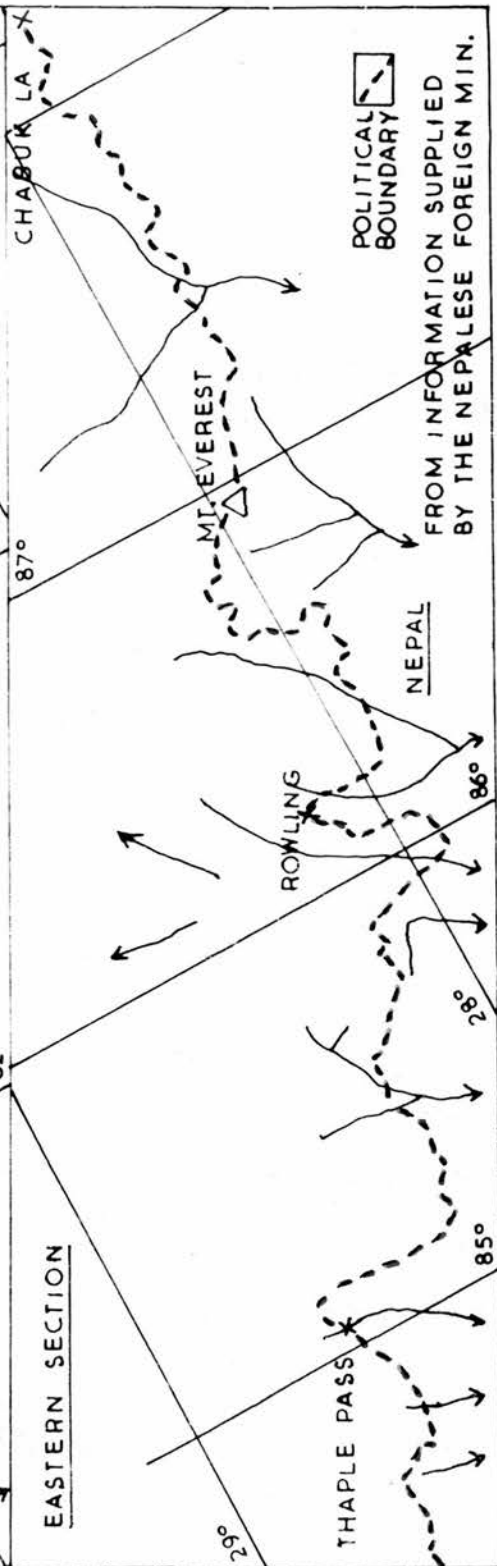
Whilst China ceased to be an effective force in international affairs Nepal concentrated upon gaining firm support for her proclaimed status as an

MAP 2 SINO-NEPALESE BOUNDARY

WESTERN SECTION



EASTERN SECTION



independent state. In 1923 Britain recognised Nepal's sovereignty by treaty. The Katmandu Government had to wait many years for similar recognition from the rest of the world, but in 1947 the United States documented such recognition, followed by France in 1949 and Nepal's large southern neighbour India in 1950. In December of 1955 Nepal took her place as a member of the United Nations, thus backing by world opinion her claim as an independent state.

The fall of Chiang's regime in 1949 heralded the leadership of Mao Tse-tung in China. A Chinese Communist delegation visited Katmandu in 1955 where the two countries recognised each other and agreed to exchange ambassadors. In 1956 a Sino-Nepalese Treaty put an end to Nepal's rights in Tibet, but provided for Nepalese trading posts in Tibet in exchange for similar rights in Nepal for the Chinese. Consulates were opened in Lhasa and Katmandu. The Nepalese Premier visited Peking in 1956 and Chou En-lai returned the courtesy in 1957 by coming to Katmandu.

Whilst China had been undergoing a revolution Nepal had been in a similar domestic turmoil. In February of 1951 under the late King Tribhuvana Bir Vikram Shah Deva the power of the Rana family was crushed and an end put to the tradition of hereditary prime ministers. In 1956 King Mahendra Bir Vikram Shah Deva came to the throne. On February 12th 1959 a new constitution was proclaimed which had been drafted by a commission under the guidance of the British lawyer Sir Ivor Jennings, and which gave the right to vote to every person over 21 years of age. In May of 1959 the state's first democratically elected government took office. On December 15th 1960 King Mahendra jailed Premier Koirala and dissolved Parliament. In July of 1961 the King proclaimed a policy of 'Guided Democracy'. It is not certain exactly why the King disbanded Nepal's effort at democracy, but there is reason to suspect that he felt his own position challenged.

With regard to her neighbours Nepal was equally sensitive to the influence of both China and India, but nevertheless concluded treaties of friendship and trade with the latter in 1950. In the same year the late Premier Nehru of India made a verbal guarantee of Nepal's boundaries to which the Nepalese Prime Minister replied, 'We have had for centuries excellent relations with China'.⁵ But a number of maps published by China in 1951 showed Nepal as part of the People's Republic, and the 1953 'Atlas of the Chinese People's Republic' published in Peking showed large areas of Nepal as Communist territory.

However, the Peking Government's attitude towards Nepal has been one of friendship despite the latter's strict neutrality. The Chinese approach to the undelimited frontier shared with Nepal was constructive. The subject of Nepal's northern border was first broached by China in 1959. Further discussions eventually led to an agreement delimiting the Sino-Nepalese boundary on October 5th 1961. The boundary has since been demarcated by stone posts (the full text of the 1961 agreement is given in the Appendix).

6

The Sino-Nepalese boundary starts from the point where the watershed between the Kali River and the Tinkar River meets that between the tributaries of the Karnali River and the Tinkar River. It then runs southeast along the watershed between the tributaries of the Karnali River and the Tinkar and the Seti Rivers, passing through the Lipudhura mountain ridge and Lipudhura

5. Reported in the 'Manchester Guardian' for March 31st, 1955.

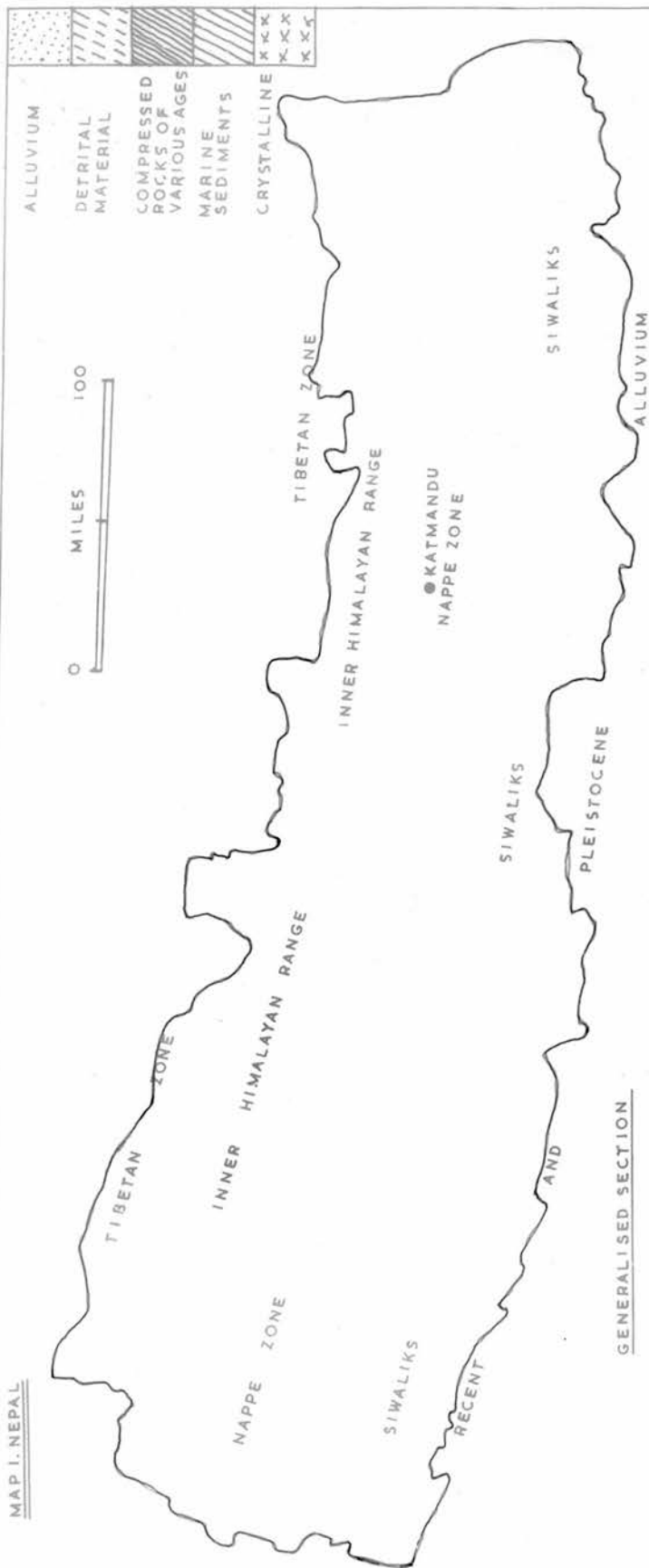
6. Details of the Agreement are given in the Peking Review for October 20th. 1961. Map 2 has been constructed from information provided by the Nepalese Embassy in London. It appears to be practically impossible to procure the exact location of the majority of the place names given in the Treaty text, and those on Map 2 have been supplied by the Nepalese Embassy.

Pass to Pehlin or Urai Pass (Map 2). After the Urai Pass mountain crestlines are favoured as the boundary travels northwards to the Lapche Pass, with the exception of the use of the Yadangre River and Karnali River briefly in the more southerly part of this section, and the watershed between the streams flowing into the Manasarowar Lake and the tributaries of the Humla Karnali River near the Lapche Pass. After this the line taken is the southeasterly watershed between the tributaries flowing into the Manasarowar Lake and the tributaries of the Machuan River on the one hand and the tributaries of the Humla Karnali River, the Mugu Karnali River and the Panjang Khola on the other. Watersheds and spurs are favoured for delimitation as far as Tingli Bhodo, then mountain ridges take the boundary to Phumhula, and Chaklo. After Chaklo the boundary runs south along the watershed between the Yalu Tsangpo River and the tributaries of the Kali (See Map 2 in Chapter 2 of this Section) as far as Lagula Pass when it turns eastwards and follows the watershed between the Tsangpo River and the tributaries of the Marshiyangdi River. The rest of the boundary (Map 2) favours mainly watersheds, mountain ridges and spurs and more occasionally rivers. In an area where the physical geography offered numerous similar lines for delimiting the boundary along, and where the human geography appears to be happily oblivious of the boundary the only problem met was the prestige of Mount Everest. Here it was decided that China should have the northern slopes within her territories whilst Nepal had the southern slopes.

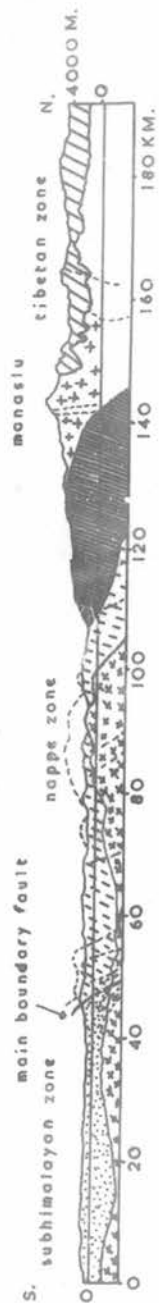
The delimitation and the demarcation of the boundary left Nepal with more territory than she in fact had considered claiming, notably in the northwest. From the viewpoint of the smaller state it has been the most favourable boundary agreement concluded between China and a non-Communist state. The

boundary had never been delimited before, and it is perhaps surprising that a Chinese Communist administration should be willing to conclude a boundary treaty with a state which a Ch'ing Emperor would have considered a vassal. The Chinese attitude throughout recent years has been most sympathetic towards Katmandu, suggesting even a minor neutralist state with a monarchy is preferable to the Chinese along their border than a more major power. As will be shown in the economic chapter (Chapter Four) of this section China has been most generous in aid given to Nepal. Nepal's geographical position of being a small state wedged in between the two vast countries of India and China is reminiscent of that of the Mongolian People's Republic between China and the Soviet Union. In both cases what is politically an unenviable geographical location has proven a useful economic one with assistance flowing readily from north and south.

MAP I. NEPAL



GENERALISED SECTION



BASED ON P.P. KARAN'S 'NEPAL' P.20

CHAPTER TWO : Physical Characteristics.

Until probably about the middle Tertiary epoch all of Nepal and most of Tibet was under the geosynclinal Tethys Sea. Following sedimentary deposition in this Sea the floor of the Tethys area began to slowly rise and develop a series of folds in parallel lines. The crests of these rising folds were subject to wind and rain erosion which decimated their symmetry. A transverse river system developed, along with attendant drainage basins. The erosion and elevation processes at work produced the mountain systems of Nepal and Tibet. Earth movements complicated the structure of the region by distortion.

Of greater importance to the political geographer than these forces of the past is the present physical characteristics of Nepal. The state can be divided into the Himalayas of the north and the Terai Plains in the south. First to be dealt with will be the physiography of the region of the Himalayas which can be further subdivided into the three zones of the southern sub-Himalayas, the Middle ranges and Inner Himalayas, and finally the northern Tibetan zone (Map I).

The sub-Himalayas are characterised by overthrust faults. The foothills of the Himalayas rise gently from the Terai to about 2,000 feet, after which there are a series of steep escarpments. A number of parallel ridges run roughly from northwest to southeast, and are separated from each other by broad valleys called 'duns'. These outer hills are rarely over 4,000 feet in height, and are composed of younger Tertiary rocks. The outer sub-Himalayas are made up of anticlines and synclines dissected into escarpments. Where the younger Tertiary strata is in contact with the older rocks

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1. This section is based mainly on D.N.Wadia: 'Geology of India'; MacMillan, London 1953; P.P.Karan: 'Nepal'; University of Kentucky Press, Lexington 1960 & T.Hagen: Communications I. & 4. of the Nepal Bureau of Mines, Katmandu 1951 & 1954.

a reverse fault is found (The 'Main Boundary Fault' shown in Generalised Section). The outermost Himalayas consist of detrital material.

The Middle Himalayas are within the range 5,000 - 15,000 feet. One of the differences between the Middle and Outer Himalayas is that the former consist of ridges of irregular direction. Much work has yet to be done on the structure of the region, but it appears to be characterised by recumbent overfolds, sliced by reverse faults passing into thrust planes along which much of the structure has moved southwards.

The Valley of Katmandu is enclosed by the Middle Himalayas to the south, and the Inner Himalayas to the north. Beyond the Inner Himalayas there is the high desert area of the Tibetan Plateau. The Inner Himalayas is a little known region, but what work has been done so far favours the hypothesis that it is built of piles of nappes.

North of the Inner Himalayas the rocks dip gently to the north at heights of over 15,000 feet. This Tibetan zone is overlain by fossiliferous marine sediments, in general these marine sediments occur only to the north of the Inner Himalayan axis.

On Map I the Middle Himalayas and part of the Inner Himalayas have been marked as the 'Nappe Zone of Nepal'. Compression in this large region has produced thrust faulting of great geological complexity. These thrust sheets² are usually associated with recumbent and inverted folds. Hagen divides the zone into a lower Nawakot nappe system and an overlying Katmandu one. The roots of the Katmandu nappes form the main range of the Himalayas.

In the main the geology of the Himalayas has controlled the relief. Nevertheless, it seems likely that a number of the more important Himalayan

2. T.Hagen: 'Über Gebirgsbildung und Talsysteme Im Nepal Himalaya'; Geographica Helvetica Vol.9; 1954., & T.Hagen: 'Nepal'; Kummerly & Frey, Berne 1962.

THE RIVERS OF NEPAL

100 MILES



rivers (e.g. the Kosi) are older than the mountains they pass through. During the mountain building period apparently these rivers kept their original beds, but eroded their channels at an accelerated rate. This led to the emergence of a fully developed valley system (with transverse gorges) with the rise of the Himalayas. Today the watersheds of the Himalayan rivers lie not along the peaks of the mountain system, but usually to the north in Tibet. Whilst the uplift of the Himalayas was compensated by downcutting in the main river valleys the tributaries did not react accordingly and most of them are discordant with the main rivers, entering them as waterfalls or cascades.

In Nepal the Terai usually varies from about 15 to 20 miles in width. It is the result of filling up by lengthy alluviation of a tectonic basin brought into being when the structure of the Tethys Sea was folded to form the Himalayas. It has a foundation of ancient crystalline rocks traversed by faults indicating that it sank after a series of block faults.

The Terai is cut by numerous rivers which present no problem in their hillier upper courses, but which tend to flood in the low lying areas. The rivers reaching the plains find their velocity checked and so deposit much of the sediment they carry; when the monsoon arrives the extra volume of water lacks the space it needs in these constricted channels and floods.

The most dangerous river in Nepal from the point of flooding is the Kosi in Southeastern Nepal (Map 2). After the Tsangpo-Brahmaputra and the Indus Rivers the Kosi is the third largest Himalayan river with a catchment area of almost 23,000 square miles. About 80% of the rainfall of its catchment area falls in the monsoon season so that from June to September the River is a torrent of water 'carrying the heaviest charge of detritus known

in a tropical river.³ The fluctuations of the Kosi have been known to lay waste up to 500 square miles of good arable land in Nepal. Although there are differences within the Nepalese drainage system the Kosi does exhibit the main characteristics of most of the other rivers within the country. (Map 2).

With regard to the climate of Nepal the most pleasant environment is at about 5,000 feet in the mountain valleys. The heat of the Terai decreases northwards into the extreme cold of the Himalayas. Elevation has much to do with the changes of climate within Nepal, whether it is with regard to insolation or rainfall. Local climates dominate much of the country, more especially in the north. Nevertheless it is possible to divide Nepal into certain broad climatic belts.

The Terai is climatically part of Northern India, having a tropical monsoon regime. The southwesterly monsoon brings summer rainfall which extends into many of the mountain valleys. The Inner Himalayas protect the more southerly areas of Nepal from the cold winter air masses of Central Asia. Although the Terai shares the same sort of climate as much of India, Nepal is a country with a certain claim to climatic uniqueness with regard to the surrounding region, if only because of the effect of the Himalayas.

The pattern of temperature within Nepal is of overwhelming complexity. Temperatures decrease with increasing altitude, and averages of less than 50 degrees F. for the coldest month begin at about 4,500 feet. Even the Terai has a distinct winter season with a January average of approximately 60 degrees, F. in the eastern districts decreasing to perhaps 50 degrees F. in the western areas. Within the Terai the June average is about 80 degrees

3. P.P.Karan: 'Nepal'; University of Kentucky Press, Lexington 1960., p.24.

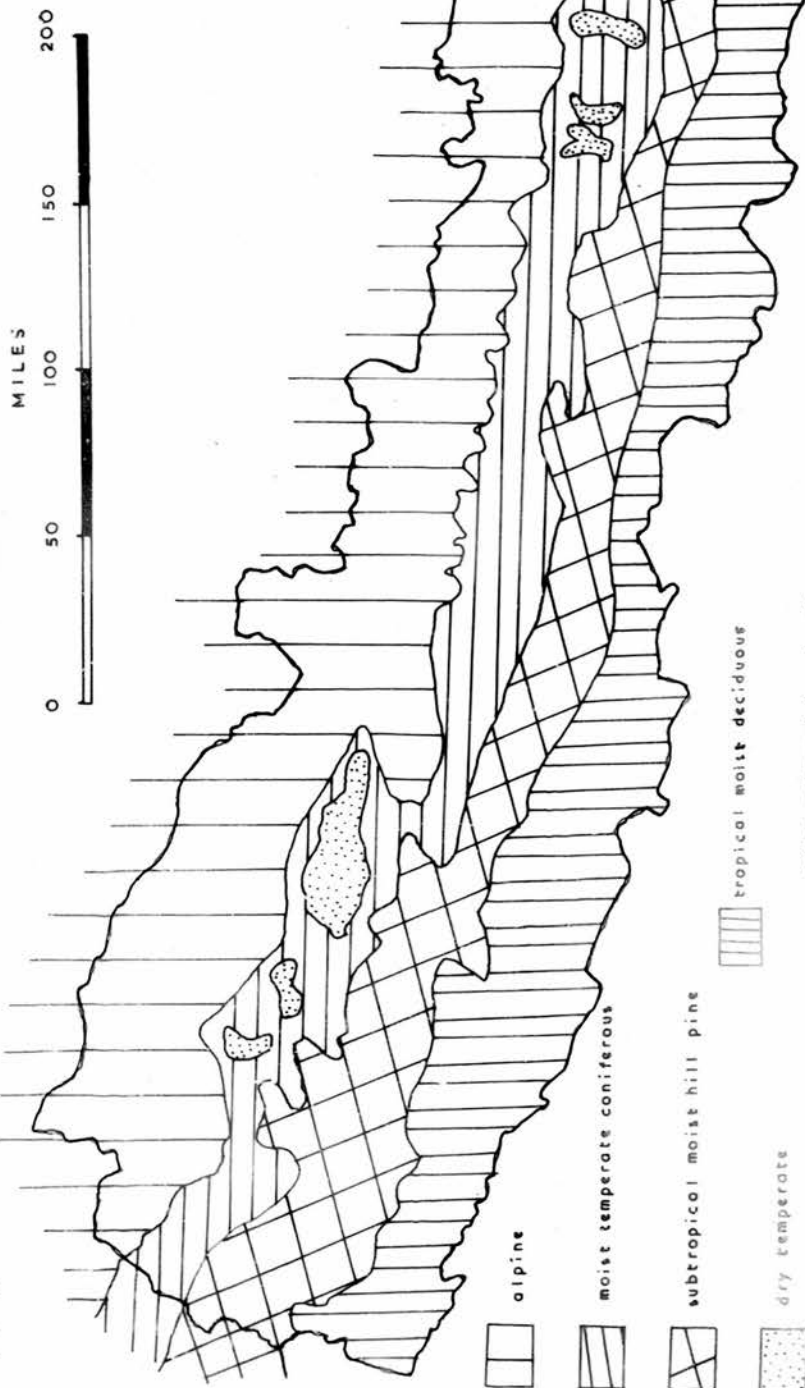
F. in the east and 90 degrees F. in the west. The mountains are affected by the degree of exposure and the elevation. In winter the nocturnal cold air often influences the climate down to 4,000 feet. Frosts and fogs are frequent. In the Valley of Katmandu the January average temperature is 50 degrees F. and the July 78 degrees F., but winter temperatures do go below freezing on occasion.

Most of Nepal's rainfall comes from the southwest monsoon which breaks in about mid-June. The monsoon lasts until September and accounts for over three-quarters of the annual precipitation in the majority of areas. There is a steady decrease in rainfall from east to west (from about 75 inches to 30 inches in the Terai). As might be expected total rainfall is higher on the Himalayan slopes than in the Terai plains. Within the Inner Himalayas exposure to the monsoon winds is the criteria for annual rainfall, within the rain shadow of the mountains the climate is very dry. In the Valley of Katmandu the average annual rainfall is 58 inches, three quarters of which falls in the period from June to September. Winter's northwesterly wind brings some rain, perhaps 10 inches in the western Terai and 20 inches in the western mountains; Eastern Nepal is not much affected by these northwesterlies which are believed to be depressions originating over the Mediterranean Sea.

With a number of reservations the climate of Nepal can be divided into three regions, the hot subtropical area of the Terai, the cooler microthermal zone of the Nepal Nappes and Inner Himalayas (Map I), and the tundra region of the Tibetan Zone which fringes the great heights of much of Nepal's frontier with China. The subtropical area is an extension of Northern India. North of this elevation tends to dominate climate with winters moderately cold to very chill and summers wet and warm in the main. At about 10,000 feet

MAP 3.

NATURAL VEGETATION OF NEPAL.



after p.p.karan's 'nepal', p.26

above sea level winters are cold and summers short and cool restricting the growing of cereals. Above 10,000 feet winters are severe. Potatoes and barley can be grown successfully up to 14,000 feet. The Nepalese tribes such as the Sherpas and Bhotias (or 'Bhotiyas') have retreated into these higher agricultural zones with an economy based on yak and sheep, and potatoes and barley. Temperatures remain in the region of 35-45 degrees F. throughout the year, but rainfall varies from valley to valley. At elevations over 15,000 feet the climate is that of the alpine tundra.

Nepal has an immense variety of soil, rock, drainage, slope and altitude which often leads to abrupt changes in the natural vegetation of the country. It is, however, possible to divide Nepal into a number of vegetation zones (Map 3)⁴.

Within the lowland Terai new riverine deciduous vegetation is found along the main river beds, taking advantage of the material brought down by the streams (sand and gravel), and usually associated with tall grasses. Away from the rivers there is a much larger area of old riverine forest consisting of semal, siris, karma, latikarma and other species. North of the riverine forests there are stands of sal, less numerous in the east than the drier west. Sal is of great economic importance, being used for housebuilding and railway ties. Sal usually grows up to about 4,000 feet.

Along the Himalayan slopes between 3,000 and 7,000 feet there is a belt of pine (Map 3). As this is an area of intensive agriculture little of the natural vegetation remains. From about 5,000 feet to 10,000 feet there is a mixture of forest species. In the eastern part of this latter vegetation zone the use of shifting cultivation has denuded most of the

4. Much of this section is based on E. Robbe: 'Report to the Government of Nepal on Forestry'; U.N. Food & Agric. Organ. Report 209., Rome 1954.

forest, but the smaller population of the western areas has meant a number of virgin stands have survived.

The more northerly temperate coniferous forest can be further subdivided.⁵ In the area from 11,000 to 12,000 feet the forest is a mixture of fir and birch and is a subalpine zone. From 7,000 feet to 11,000 feet there is oak, bamboo and larch. There is a difference in vegetation between the northern and southern slopes of the Himalayas with fir doing poorly on the latter. Where rainfall is less abundant, as in the northern slopes of parts of the Inner Himalayas, moist temperate coniferous gives way to such dry temperate vegetation as junipers, or even thorn bushes.

The higher areas of the Himalayas have an alpine vegetation. The plants are suited to the extreme cold, small rainfall and short growing season. Trees are rare, occurring only in sheltered places. Southern slopes may have short woody plants, whilst north facing areas will have little other than lichens and mosses.

Soils are dominated by climate and relief in their formation. In the main Nepal's soils reflect the tropical, temperate and alpine vegetation zones and the mesothermal, microthermal and tundra climatic regimes. Azonal lithosols are found on the higher, steep Himalayan slopes, but the gentler mountain sides where the vegetation cover is adequate have shallow zonal soils. Tropical deciduous and humid subtropical forest gives red and yellow soils on the lower slopes, giving way to brown or gray podzolic forest soils on higher ground. Under temperate coniferous and subalpine vegetation mountain meadow soils are formed. In the southern areas of Nepal there is a belt of alluvial soil covering about 9,000 square miles. Although these Terai areas

5. H.Kihara, editor: 'Fauna & Flora of Nepal Himalaya'; Fauna & Flora Research Society, Kyoto 1955. p.287.

have local variations in the soil the alluvium is all derived from the river system's deposition. After the alluvium of the Terai there comes a slope of shingle and gravel along the foot of the Himalayas. Coarse gravels are here mixed with sand and clay. The Himalayan foothills are of immature sandy and shallow soils. Above geology is very much the subordinate of climate. Here the red and yellow soils of the pine forests give way to brown and gray podzolic forest soils which are succeeded by mountain meadow soils at a higher level. It is thought that the Middle Himalayan soils are scant with much of the southern slopes bare rock, and the northern faces clothed by glacial, fluvioglacial and rainwash soils. The valleys of the region are floored with drift gravels and morainic material brought down from above the snow-line. On terraces some alluvium may accumulate. The Inner Himalayas suffer much erosion by glacier, there being some 8,500 square miles of glaciers amongst the higher peaks of Nepal.

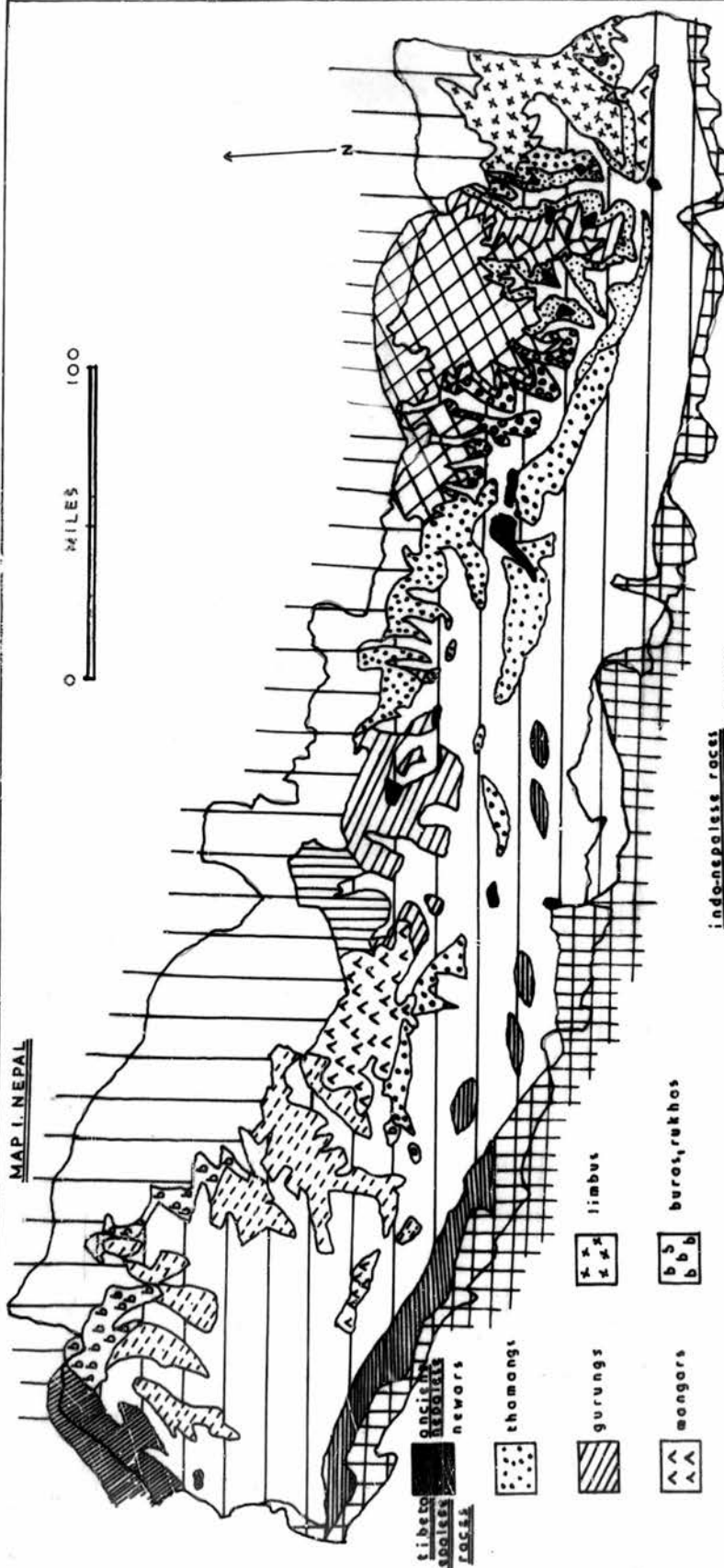
Physically Nepal is part of Northern India along its southern boundary (the Terai) and can be included in Tibet in the extreme north of the country. Between these two zones is what might be termed a distinctly Nepalese region which has served throughout the ages as a refuge area for peoples and ideas. Nepal is not dissimilar from Tibet in its possession of a core area around which there is a peripheral zone more available to outside influences. Whereas Tibet was more open to the culture of the north, and notably China, Nepal has tended to receive more from the Indian subcontinent due to it being physically more available to the south. Nevertheless communication between Tibet and northern Nepal until the 1951 Chinese take-over in Lhasa was readily available and profitably used. It is interesting to note that the Gurkha military expansion of the late Eighteenth and early Nineteenth Centuries was both to the south and the north, suggesting that to a determined ruler with

an army used to the environment the physical disadvantages to movement towards the north were not particularly greater than those through the Terai.

The diversity of physical geography within the state of Nepal has had its effect upon the considerations of political geography. The hindrances of such factors as relief, vegetation and climate (e.g. the rainy season) to movement has encouraged the development of distinct regions largely caused by isolation. The difficulties in administering such a group as the Sherpas in the north from Katmandu makes the central authority ineffectual within the area. Nepal is not an effective political unit largely because the hindrances of physical geography have not been tackled; if it was possible to get by good road from Katmandu to the Sherpa area Nepalese nationalism might now have replaced Sherpa tribalism. Similarly, the political boundary between China and Nepal will not become an effective division within the landscape until the physical isolation of the area is broken down.

MAP I. NEPAL

0 100 MILES



tibetan
nepalese
races

thamangs

gurungs

mongars

sunwars

rajs

limbus

buros, rukhas

tharus

tibetan
bhotiyas

sherpas

chokals

indo-nepalese races

nepalists
brahmins,
kshatriyas,
gurkhas, khos,
chhetris, thakurs.

thakurs

garwhals, kumaons.

indian
indians

after t. hagen 'nepal' p. 61

CHAPTER THREE : The People

1

According to the June 1961 Census of Nepal the country has a population of 9,387,661, which represents a density of 174 persons per square mile, and an annual rate of increase of 1.6%. The Valley of Katmandu (Katmandu, Patan and Bhatgaon) has a population of 456,804, and a density of 2,095 persons per square mile.

2

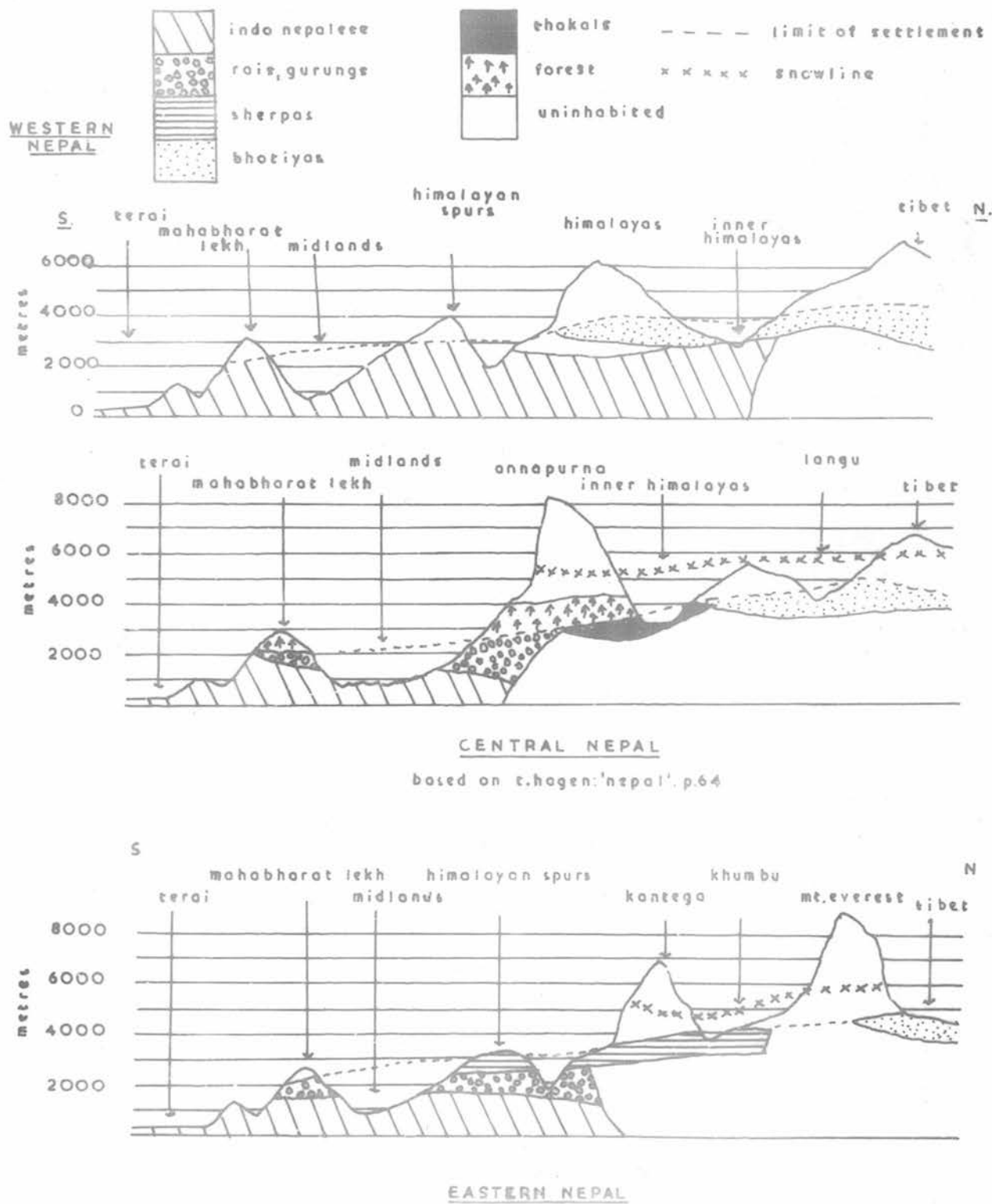
Of Nepal Hagen states 'Few countries exhibit such racial, ethnical, linguistic and cultural diversity ... the country may rightly be called the 'ethnic turn-table of Asia''. The population can be divided into two main physical types, namely the Tibeto-Nepalese, with Mongoloid, and almond-shaped eyes (the former has the upper lid falling low to cross the lower lid and cut off the inner corner of the eye, whilst the latter has the upper eyelid falling partly over the edge of the lower eyelid), and the Indo-Nepalese with open eyes. This physical division tends also to be followed linguistically with the Tibeto-Nepalese belonging to the Tibeto-Burman language family, and the Indo-Nepalese speaking languages derived from an Indo-Aryan source. The Tibeto-Nepalese tribes (Map I) can be divided into Ancient Nepalese and Tibetan groups which are further subdivided, and the Indo-Nepalese into Nepalese and Indian groups, which are also further subdivided.

Certain groups appear to favour certain types of environment. The Ancient Nepalese settled in the heart of Nepal at an early date, and it was only much later that there was an infiltration of the Indo-Nepalese and Tibetan tribes. The original Ancient Nepalese in the Middle Himalayas were little bothered with settling the fever-ridden plains to the south, or the

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1. H.B.Gurung in the 'Geographical Journal', Vol. 128, Dec. 1962, p.574.
 2. T.Hagen: 'Nepal'; Kummerly & Frey, Berne 1961. Much of this chapter is based on this book (quotation from pp.59-60), & C.Von Furer-Haimendorf: 'Himalayan Barbary'; John Murray, London 1959.

FIGURE 1.

ETHNICAL CROSS SECTIONS THROUGH NEPAL



high mountains to the north. But the coming of the Moslem religion to India gravely disturbed many of the Indian states bordering Nepal and there was an influx of refugee Hindu Brahmans (priests) and Kshatriyas (warriors) to take advantage of the valleys of the more remote Himalayas; as they came from the plains the Indians rarely settled above 6,000 feet. These refugees were all of high caste. Under this pressure from the lowlands the Ancient Nepalese races had to retreat also. Today where the Rais and Thamangs once followed the Bon Po doctrine there are Hindu worshippers amongst deserted chortens and prayer-walls.

The Tibetans, suffering from a harsh climate, looked with a certain amount of envy towards the Nepalese Midlands. By the time Europe was facing the Middle Ages the Sherpas had settled in Eastern Nepal and the Thakals further west. These invaders did not conflict with the Ancient Nepalese inhabitants as they settled in the valleys above 7500 feet. Right up into this Century Bhotiyas have continued to come from Tibet and settle in northern Nepal.

The Ancient Nepalese races did not settle in Western Nepal. Here much of the land between 6,000 and 10,500 feet is uninhabited and represents a boundary between the lowland Indo-Nepalese races and the highland Tibetan peoples.

To summarise, the Indo-Nepalese groups cover most of the Midlands and Terai of Nepal (for further clarification see Fig. 1.), the Ancient Nepalese races are found on the higher areas of the Midlands and the southern flanks of the Himalayas, whilst the Tibetan groups are in northern Nepal.

The main settlement of the Newars is the Valley of Nepal (Map I) with a scattering in other parts of the country. They have almond-shaped eyes

(Palaeo-Mongoloid) and are slim in build and small in stature. Indo-Nepalese traits can be found amongst many of the Newars due to inter-marriage. They are very much a Nepalese minority, and always have been, yet the culture of the Midlands region is theirs. Their culture is one of the outstanding ones of Asia, rich in mythology, outstanding in agricultural science (their irrigation laws would make an interesting study in themselves), and throughout their history excellent craftsmen. It is thought that the pagoda style of architecture was introduced into the rest of Asia by Newar builders brought to Peking by the Mongol conquerors. They were great traders and many towns outside the Valley of Nepal owe their origins to having been Newar trading posts in former times. Such Indian towns as Calcutta and Patna still have their large Newar depots, and until 1959 there was an extensive colony of Newars at Lhasa. The Newars are adherents of the Hindu Siva or Gautama Buddha.

Also of the Ancient Nepalese race are the Thamangs who today cover a much greater area than the Newars. The Thamangs were originally located on the southern flank of Ganesh-Himal, and their southern expansion is recent. They have pronounced Mongoloid features and are of thickset build except in the southern areas where they have mixed extensively with other racial groups. In their source area between elevations of 4,500 feet and 8,000 feet they have rice on the valley floors, maize, millet, and barley at the middle levels and potatoes up to the tree line. They raise water buffaloes, sheep, cattle and goats. There is a tradition that the Thamangs originally came from Tibet. In the more remote areas the Thamangs have kept a form of Shamanism which is pre-Buddhist and found also in Tibet. The majority of the Thamangs now follow a form of Buddhism very similar to that

practised in Tibet (Lamaism). In the lower areas of Thamang settlement the Hindu religion has made some progress.

The Gurungs came from the southern slope of the Annapurna Massif and so adjoined that of the Thamangs in the west. The Gurungs have spread west, south and east. The villages of the Gurungs are the largest type in Nepal and are situated on high slopes surrounded by fields of maize and millet. As with the Thamangs the Gurungs cultivate rice in the valley floors. In summer they practise transhumance with their cattle, bringing them up onto the higher pastures unavailable in winter. They are mongoloid or almond eyed and short in stature. Although they were originally Shamanists and later Lamaists the Gurungs are now mainly Hindus. They have provided an exceptionally large number of mercenary soldiers.

The most westerly of the Ancient Nepalese are the Mangars, although a subdivision (the Rukhas and Buras) of the group is found in eastern Nepal. As neighbours of the Gurungs the Mangars are found mainly on the western and southern slopes of the Dhaulagiri Massif. Although this is the chief area the Mangars are also in scattered colonies to the south and east. Their architecture is borrowed from the Tibetans in their northern areas, and from the Gurungs farther south. Traditionally the Mangars are the blacksmiths and bridge constructors of the Nepalese, and have been responsible for the early attempts at mining. The Mangars can be divided into two culturally between the northern areas where the ways of Tibet are favoured (religion, trade etc.) and the southern Hindu regions. Like the Newars the Mangars are almond-eyed, slim and small. They have also provided both the British and Indian armies with many thousands of mercenaries. It is interesting to note that practically all the mercenaries have been recruited from the Ancient Nepalese races, and so the areas where they have been found enjoy a higher

standard of living than other parts of Nepal.

The Rais and Limbus are often classified together as the Kirantis. They are Mongoloid and traditionally noted for their military prowess. The Rais and Limbus appear to have a common origin, but at present inhabit different parts of Nepal. The Rais live in the catchment area of the Sun Kosi River at heights between 4,000 and 7,500 feet. The Limbus are found between the Arun River and the border with Sikkim. Apart from the Sherpas the Limbus have the highest standard of living in Nepal. The religion of the Rais and Limbus is a mixture of local myth, Lamaism and Hinduism. It seems possible that the Kirantis may have provided the ruling caste in Nepal from about 700 B.C. to 100 A.D. According to their own traditions it was not the Newars who were the first to settle in the Valley of Katmandu, but themselves. Again, these tribes have been a source of mercenaries.

The only Ancient Nepalese living in the Terai are the Tharus who display many of the racial characteristics of the negroid type. Nevertheless blood group tests have shown that the Tharus are related to the other Ancient Nepalese racial groups. Although the open eye is the most common there are almond-eyed Tharus as well. They are hunters, fishermen and cultivators.

There are numerous small Ancient Nepalese groups such as the Sunwars of the Sun Kosi River area who are noted throughout Nepal as smiths and gold workers. Although there are also the Buras and Rukhas in western Nepal so little is known about them that it is not possible to elaborate on their characteristics.

The Indo-Nepalese peoples who fled into Nepal from the strife of northern India did not always enter the country peacefully. The first invaders were the Thakurs who are at present located in western Nepal (Map I). Although the immigrants have been partly assimilated by the native populations of Nepal

they have also conquered the inhabitants in many areas and become the ruling classes. The Brahmans who came with the victorious warrior tribes from the south managed to retain their religico-social pre-eminence within Nepal and imposed their caste system where possible. In order to gain support amongst the local population (Newar etc.) they created the highest classes amongst the natives Kshatriyas, but this was unacceptable to the pure-bred Kshatriyas from the Indian subcontinent who named the Nepalese warrior caste 'Khas'. The name Chetri is probably from Kshatriyas. Children of marriage between Brahmans or Indian Kshatriyas and Ancient Nepalese were automatically Khas. Many clans came into being amongst the Khas caste. When the Shahs gained power in Gorkha their main support came from the Khas. The Gorkha Khas had their own language derived from the Hindi of the Rajputs which was later the official national tongue called 'Nepali'.

Unlike the Indo-Nepalese the Tibetan immigration was peaceful, the tribes settling in the uninhabited areas above 9,000 feet in the main. As can be seen from Map I their settlement has remained very much a northern one. The mountainous nature of their new environment often meant that the valley settlements had no contact between each other and so developed along independent lines. An example of this is the Thakals and Sherpas who entered Nepal as a single tribe. They are racially similar, Lamaist, each settled along trade routes between Tibet and India, and share a language related to that of Tibet. The Thakals are on the most important routeway between India and Tibet; they are lively, fairly prosperous and primarily merchants and traders. Due to their trade they have been influenced by the cultures of the Ancient Nepalese and India. The Sherpas are famous as mountain porters. The Khumbu Valley Sherpas depended upon the caravan routeway to Tibet for their livelihood and so their culture has tended to be that of Tibet. It is a stronghold of

Lamaism. At 11,500 feet above sea level the soil here is frozen for four months in every year. In summer the upper pastures help to supplement the potato diet (utilised for transhumance as in Switzerland). The Khumbu Valley is the heart of Sherpa country and yet has a population of under 2,250 persons. The Sherpas prefer to raise cattle than till the soil. Despite a thriving agriculture based on the potato and cattle Sherpa prosperity owes much to trade. Along with the Thakals the Sherpas are the only tribe with an organised trade with Tibet; unfortunately Chinese policy has done much to hinder this trade since 1951. The Thakals and Sherpas were middlemen exporting their own cattle and butter, plus Indian and Nepalese rice, paper, dyes, sugar and kerosene, and importing Tibetan salt and wool. In the Khumbu Valley many of the Sherpa houses contain Chinese porcelain, brocade, silk and jewellery. The Thakals have abandoned agriculture in their arid environment, but the reliance on cultivation and pasturing in the Sherpa areas has led to a kind of democracy where such positions as that of the man regulating the distribution of pastures are elected ones. The extended family system of the Hindu influenced areas does not exist amongst the Sherpas where each man and wife set up their own household away from their parents. Due to the demands of transhumance and trade polyandry is common. The Sherpa lamas differ from those of Tibet in that they have to support themselves. As can be seen the Sherpas are still greatly influenced by Tibet, whilst the Thakals have been much affected in their culture by their contacts with the Ancient Nepalese and India.

As with much of the physical geography of Nepal the cultural geography can be subdivided into three areas. In the north such tribal groups as the Sherpas derive their culture from Tibet. Until the arrival of Chinese Communist power in Tibet the Tibeto-Nepalese boundary was of little significance to the northern tribes. The allegiance was always to the tribe and the

family with the concept of the state something of which the people were unaware. The Bhotiyas were free in their movement across the Tibeto-Nepalese boundary and were oblivious to the fact that they were straddling such a line, as their present distribution demonstrates. The boundary had little influence on geographical distributions. In northern Nepal the first thought is still of the tribe, but the Chinese, despite friendly relations between Katmandu and Peking, have been much more active in the border area than any previous Chinese or Tibetan regime. There is no longer such a free movement across the boundary. A Sherpa minority is now included within the People's Republic of China, and with Peking's strong assimilation policies this will probably lead to a growing dissimilarity between the Sherpas of Nepal and those of China. This may also prove the case with the Bhotiyas. Although with less effectiveness and vigour Katmandu is also trying to bring its administration into the northern areas, nevertheless it can be expected that the independence at present demonstrated by the northern tribes will become less in later years. At present the central authority within Nepal is only fully effective in the region of the Valley of Katmandu, but the programme of economic development, more especially in transportation, will eventually break down the isolation of the tribes of the north and the south. In the third cultural region of the south India has no wish to close the boundary with Nepal, but here the latter is very sensitive to the great influence of her neighbour, and is anxious to counteract it with more effective government of these areas. Nepal is making an effort to impose more effectively her political control within the state area, and especially in the border zones.

CHAPTER FOUR : The EconomyAgriculture

Economically Nepal is an underdeveloped country. Of the state's working population over 90% are farmers and agricultural labourers. Over 90% of the population is illiterate, that most problematic of ailments for a country determined upon a path of economic development. There are only 1,000 hospital beds in the whole state area, and the average expectancy of life is 30 years; 75% of the population have never seen a doctor. The average income of a Nepalese is £50 per annum.

Most of the land suited to arable farming in Nepal is already being used. A little more than 10% of the total area is under cultivation. Most of this land is located in the Terai areas (65%), and in the southeastern Terai 70% of the land is cultivated. In the eastern Nepal many tracts of land now used for arable are better suited to forest development or pasture and are being challenged by soil erosion. Other areas of western Nepal could be used for cultivation if the rainfall was less uncertain. There is a lack of irrigation development with only 20% of the cultivated land being irrigated at present.

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1. The following have been important in writing this chapter:
 G.V.Bowers: 'Agricultural Development in Nepal', U.S.Foreign Agricultural Service Publications, Washington 1953; S.Cammam: 'Trade Through the Himalayas', Princeton University Press, 1951; C.Furer-Haimendorf: 'The Sherpas of Nepal', John Murray, London 1964; T.Hagen: 'Nepal', Kummerly & Frey, Berne 1962; & Y.P.Pant: 'Nepal's Economic Development on an International Basis', Nepal Cultural Association, Katmandu 1956.
 2. P.P.Karan: 'A Land Use Reconnaissance in Nepal by Aerofield Techniques & Photography', Proceedings of the American Philosophical Society, Vol. 104, April 1960 pp.172-187.

A difference in physical environment leads to a variety of crops being grown. About 55% of the land cultivated is under rice, a further 20% in maize and millet and 10% in wheat. Potatoes, sugar cane, jute, tobacco, buckwheat and vegetables occupy the rest of the arable land.

The eastern part of the humid Terai is the main cultivated area of Nepal. An extended monsoon period gives a rainfall which encourages up to three crops a year. Two crops of rice are normal with a third crop of jute or sugar cane. This is the great agricultural export region of Nepal and is economically the most important in the state.

The Inner Himalaya has a number of fertile valleys, mainly at a height of between 4,000 and 5,000 feet. Deep soils favour an intensive agriculture and the complex physical geography has led to the development of core areas of dense population widely scattered. The Valleys of Katmandu and Pokhara provide excellent examples of these, and they have considerable importance as centres of political power within Nepal. In the sparsely populated and more lofty valleys of the Great Himalaya agriculture is practised as high as 14,000 feet, but it is based on an economy of herding and potatoes. These higher valleys are economically backward and remote and until the Chinese Communist take-over in Tibet were orientated towards the latter rather than towards the south.

There is a need to increase the food production of Nepal to cope with a population increasing at the rate of 150,000 per year. Despite political stability within the state being intertwined with economic stability the administration's efforts to improve agricultural production have not been impressive. There is not much opportunity to increase the actual area of cultivation in a country which is so mountainous, but there are exciting

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3. This point of limited possibilities for further expansion of cultivated area was proven in P.P.Karan & W.M.Jenkins: 'Population, Land Utilization, & Possible Expansion of Cultivated Area in Nepal', Pacific Viewpoint, Vol.2, No.1, March 1961, pp.41-58.

possibilities with regard to developing much better crop yields. Such improvements are hindered by the non-acceptance of crop rotation, the limited irrigation facilities and the shortage of fertilizers. In the Terai's drier areas the fields lie fallow for the 8 months of the dry season. The rice stubble is used to graze cattle, although it is poor forage and the attitude towards herding in the Terai is complicated by the bulk of the population being Hindu.

Although efforts are being made to modernise the system of land taxes in Nepal land tenure is complex and inhibits efficiency in agricultural production still. It has only been recently that in land taxes and rents any consideration was given at all to the size or productivity of the holding. Certain lands still have a very privileged status and reflect the feudal trappings of a society which has been too long out of the Twentieth Century. The tax burden is borne by the smallholder and the tenant farmer, although the rent free holdings of the Rana family were abolished by 1961. Other members of the nobility still enjoy privileges of various kinds in relation to their land holdings and progress is slow at adjustment with so many interested parties in positions of power around the throne.

Further hindrance is felt in agricultural development by the prevalence of rural indebtedness. In the western areas during the years of poor rainfall, or in the eastern lands when the crops do not match up to expectation, tenant farmers are forced into debt in order to pay the rent. The rate of interest demanded on such loans is too high to permit the farmer to be able to repay it. A Royal Land Reforms Commission was set-up in 1961 to make recommendations to the administration for the improvement of agriculture. Its report was presented in 1962, but it seems improbable that the question

of rural indebtedness will be overcome for many years yet. 'Working under a burden of debt, the Nepalese farmer can make little improvement on the land, and progressively poorer yields involve him in a vicious circle which has its effect on the total productivity of Nepalese agriculture.'⁴

American and Indian aid is being directed at the increasing of the irrigated area within Nepal. There is a Nepal-United States Irrigation Fund which has been financing irrigation projects in the Terai. It is in India's interests to encourage the improvement of Nepal's agriculture as she takes all of her surplus except for a certain amount in the north which is smuggled across the boundary into Tibet.

The Nepalese farmer is an arch conservative in his methods. An American economic mission demonstrated to some Nepalese farmers amongst whom they lived that by changing their strain of seed the Nepalese could double the yield from rice and maize without any extra effort, and that by planting the maize seed closer to the surface it grew faster and had larger cobs. Despite the evidence before their eyes the Nepalese farmers would not change their traditional seed or technique of planting.

The agricultural economy of Nepal seems to be typified by the Nepalese farmer's liking for the keeping of the 'tsauri' which is a cross between the yak and the cow and does not appear to have any advantages over either, but is distinguished by having the added disadvantage of being sterile.

The Nepalese launched their first Five Year Plan in 1956 which was described as a 'pilot scheme' and proved something of a failure. A Three

4. P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms', Van Nostrand, Princeton 1963, p.103.

Year Plan followed in 1962 and a second Five Year Plan is due to run from 1965 to 1970. These later Plans are aimed at abolishing caste discrimination, gaining equality for women, introducing much needed agrarian reform to deal with tenure, taxation and indebtedness, and the establishing of rural credit banks. More fertilizer production, better seed and improved techniques of farming are also included in these ambitious Plans. Whether Nepal succeeds by 1970 in achieving these targets would seem doubtful in face of the competition from the conservative farmers, the problem of capital, and the vested interests being challenged.

Mercenaries.

Just as in the Europe of Francis I and Charles V mercenary service provides Nepal with a very important source of income. The first Nepalese mercenaries were levied by the British in 1814 A.D., and by 1908 when the last so-called 'Gurkha' regiment was raised the Brigade comprised of two regiments recruited from the Rais and Limbus, one from the Khas, and seven from the Mangars, Thamangs and Gurungs, in all twenty battalions. In the First World War the British Army recruited 200,000 Gurkhas, and at the end of the Second World War had forty five Nepalese battalions within its ranks. Between 1915 and 1945 the Gurkhas were awarded 12 Victoria Crosses which is still the greatest prestige symbol amongst the hill tribes such as the Gurungs. In 1947 the partition of India led to the Republic of India (as it now is) taking over six of the regiments of Gurkhas and Britain retaining four of the regiments. At present there are 14,000 Gurkhas serving with the British army, and perhaps 20,000 with the Indian army.

Ethically this mercenary service of the Nepalese is frowned upon by

the nationalists within Nepal, and attempts have been made to decrease the numbers involved. However, the economy of the country could not at present withstand the abolition of this fruitful source of revenue. The standard of living is higher amongst the northerly tribes than the Hindus of the Terai because of the revenue from mercenary service. Service is for 15 years and is well paid by the standards of Nepal. The Gurkhas of the British army afford Nepal a million pounds a year in sterling, which is about 40% of the state's foreign earnings. After their fifteen years of service in the British army the Gurkhas get a pension of 240 rupees a year which is roughly five times the average annual earnings of a cultivator from their home area. The Gurkha on active service earns about twenty five times the amount a cultivator can get in a year. What is surprising about the large number of ex-servicemen amongst the Nepalese is not that there should be an outcry against the indignity of mercenary service, but that the Government has not put the training of these men to practical ends. Except for the starting of schools in their villages the returning servicemen resort once more to their peasant farming.

To provide alternatives to mercenary service and develop the economy one of the crucial problems is education. During the first Five Year Plan 6,350 people received technical training, of which 350 graduated abroad. The first modern secondary school was established by American Jesuits without any religious strings attached and has been producing very high calibre students and has special links with Cambridge University. Under the Three Year Plan it was expected that a further 7,000 people would be given some sort of technical training. In 1959 the University of Triv-
hawan was opened in Katmandu and now has about 300 undergraduates. Also established in Katmandu is an American run teacher training college. The

Government have plans for a teacher for primary education in every village in the distant future. Nepal is in a desperate way educationally, but it is one of the problems being faced more realistically than many others. There is little urge to establish the expensive prestige symbols of Nepalese universities as yet which would be understaffed and undercapitalised. Nepal is willing to send her students anywhere as long as they get an education. This perhaps demonstrates Nepal's adherence to neutrality in her foreign affairs as well as anything.

Mineral Resources and Industry.

For a number of years the United Nations have been engaged upon the production of a geological survey of Nepal. This survey is as yet incomplete, but it is already reasonably certain that Nepal has few of the mineral resources necessary for industrialisation. Coal, iron, mica, copper and cobalt have been found in various parts of the country, but reserves are small and usually of poor quality. The minerals are unsuited to large scale mining development. Also the deposits are mainly in areas where access is such as to make transport costs prohibitive.⁵ Similarly, the geological structure of much of Nepal is highly faulted and folded which makes continuous deposits of minerals less likely.

The Swiss Government first helped Nepal with the job of geological survey, and later the United Nations started a general mapping of the geology. Using its International Co-operation Administration the United States has helped Nepal to establish a Bureau of Mines in Katmandu with a staff of Indian and American trained geologists and engineers. The Geological Survey of India is also helping with other mapping projects.

Despite her general lack of mineral resources Nepal does have great

5. G.E. Pearson: 'Nepal's Mining Prospects'; Far Eastern Economic Review, Vol. 34, October 19th. 1961. pp. 170-171.

potentialities with regard to hydro-electricity. There are few countries in the world with such hydro-electric development possibilities in a similarly sized area. At present the total installed hydro-electric capacity is only 1350 kilowatts, and that is mainly in the Valley of Katmandu. There are small thermal and hydro-electric plants at Biratnagar in the southeast of Nepal. Hydro-electric projects are restricted by lack of capital, equipment and trained manpower. The geologist Hagen⁶ worked out a scheme using the Karnali River in western Nepal to demonstrate the possibilities. The Karnali 'forms a huge S-shaped meander where it breaches the mountains (Mahabharat Mountains). Two tunnels, one 2.6 kilometres long and the other 5.5 kilometres, could each cut off one of the two loops of the river, and in the first case a fall of 180 metres, in the second case one of 110 metres, would result. The Karnali, however, is one of the largest rivers in Nepal, with a mean flow of about 300 cubic metres per second at the low-water period. Without constructing a dam, therefore, by means of only a simple water-inlet with a short tunnel, approximately 1.3 million kilowatts of electrical energy could thus be won at these two places together. This would surely be the cheapest electrical energy in the whole world.' Such a development would mean that there would be a far better supply of nitrogenous fertilizers for Nepal's agriculture and industry would partly compensate itself for a lack of mineral resources by the cheapness of its power. The United Nations has made the Karnali part of its future programme. At present there are four new hydro-electric stations under construction which will give an additional 22,000 kilowatts of power by the end of 1965. This is only scratching at the possibilities, but will more than cater for Nepal's electricity needs in 1965, and

6. T.Hagen: 'Nepal', Kummerly & Frey, Berne 1961, p.105.

an export of power to Lucknow is expected. If greater effort was made to develop Nepal's hydro-electric resources India would be willing to take any surplus of power as she is short of electricity, and Nepal would have a profitable export which could cater more and more for her own needs later.

There are excellent marble quarries south of Katmandu at Godavari, but the very promising export trade is retarded by poor transport. Oil prospecting continues without success. The import of petroleum products costs the country about £100,000 per annum in precious foreign exchange. Similarly, Nepal has no salt and is dependent upon India now that the Tibetan source of supply has been largely cut off by less freedom of movement across the Sino-Nepalese boundary following the Communist revolution. As the retailing and wholesaling merchants of the Valley of Katmandu find the trade in the northern areas especially unprofitable where salt is concerned each family every year sends one member with a load of their agricultural surplus to barter for salt. According to the position of the village in relation to the source of salt this journey may take up to two months. It is quite common for a Nepalese family to receive only about £2 for their wares once their representative reaches the border with India due to the poor quality of the agricultural products after the journey. The £2 earned this way may represent the total cash income of the family concerned for the year, although it should be remembered that the farmers will have fed their families and also probably paid off part of a debt to the local moneylender with some of their crop (interest rates are usually 35%). To supplement this agricultural income many thousands of Nepalese migrate temporarily to India for seasonal employment of road construction and tea plantations. There are about two million Nepalese now living in Assam, and perhaps another quarter

of a million work seasonally in Bengal, Sikkim and Assam.

The Sherpa, Thakal and Bhotiya salt traders felt the take-over of the Chinese Communists in Tibet more severely than most of the population of Nepal. The economy of the northern tribes such as the Sherpas and Bhotiyas was wedded to that of the Tibetans. Since the mid-1950's there has been a distinct mellowing in the Chinese attitude towards the Nepalese and with the increasing success in integrating Tibet into China so trade across the Sino-Nepalese boundary has shown signs of once again increasing.

The problem of capital for development is a difficult one which pervades all economic considerations with regard to Nepal. The low earnings of the people and the lack of exports make capital a scarce commodity. As with many other similarly situated states Nepal has to rely on foreign aid to finance her development projects. Switzerland was the first country to send a technical aid mission and that was in 1950. In 1951 the United States began to assist Nepal, and even although Nepal was not a member at the time in 1952 the United Nations extended assistance to Katmandu. 1960 provides a good year as an example of the foreign aid Nepal has been receiving, although it should be pointed out that these figures do not take into consideration such factors as the education and health work carried out by the Christian missions. In 1960 the United States gave Nepal £3,180,000 in aid, India £2,010,000, China £1,500,000, the Soviet Union £275,000 (Panaoti electricity station and a sugar refinery,) United Nations £55,600, Switzerland £19,000 and the Colombo Plan countries £16,150. With the Ford Foundation also giving a grant of £56,750 this made a total of £7,112,500. The aid of the United States, China, India and the Soviet Union appears to be partly forthcoming due to the geographical position of Nepal between Communist China and the Major Neutralist state of India. In 1963-64.

the aid givers changed positions a little with the United States giving 40% of all foreign aid, India 28%, the U.S.S.R. 15% and China 8%, but the latter can expect to jump to at least second place during 1965 or 1966 as Peking is reputed to have been lavish in her promises of aid to Katmandu over the next few years, one of the notable projects being a Lhasa to Katmandu railway construction beginning in 1966.

Most of Nepal's manufacturing is of the type usually described as 'Cottage industry'. There are few factories in Nepal and the total number of workers employed in them is only 20,000. The subscribed capital invested in industry is less than £2 million. The largest industry in terms of capital investment is jute, with cotton manufacturing next and food processing third. These three industries account for over 75% of the capital investment.

As in so many Asian states Nepal regards industrialization as a way of increasing the standard of living for the bulk of the population. As has been stated already there is only a poor mineral base from which to build up industry, to which can be added the fact that Nepal is not really an agricultural surplus area, and has a population with small purchasing power and few technical skills. Political instability deters foreign and domestic investment, although in 1961 the Indian company of Birlas agreed to construct a textile mill costing about £1½ million in the Valley of Katmandu; this is now the largest industrial enterprise in Nepal and produces 20 million yards of cloth per year.

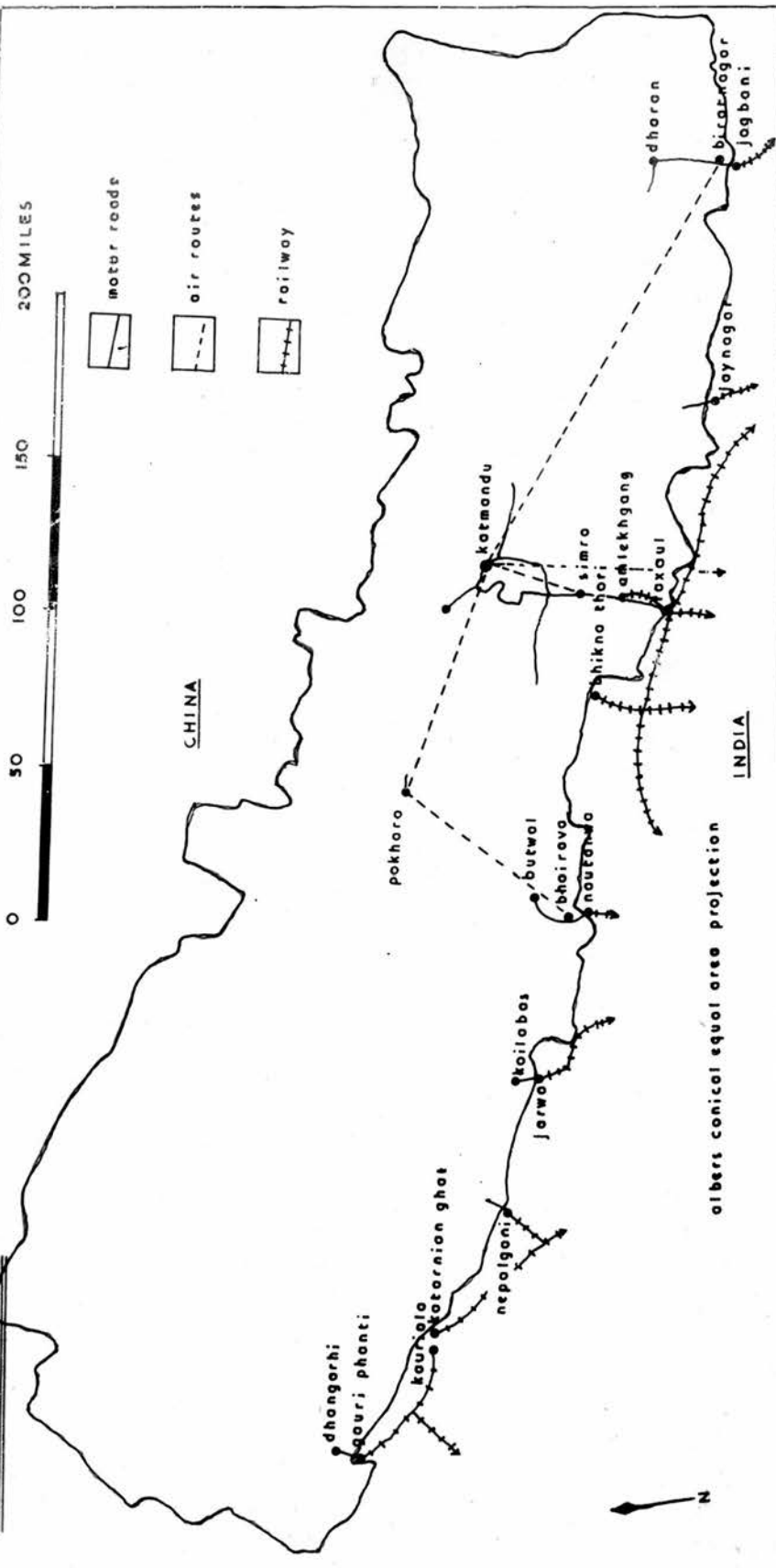
Despite these problems Nepal is going ahead with plans for industrialisation. Under the first Five Year Plan a start was made on plants for paper, cement, cigarette and sugar processing on a modest scale. In

1963 Britain gave Nepal a medium term loan to increase further her plans for electricity production (£800,000). In 1962 the United Nations Special Fund agreed to assist with a three year survey of the hydroelectric potential of the Karnali River basin at a cost of £340,000. Nepal has an Investment Guarantee Agreement with the United States, although as yet no American firms have set up factories in the country. The United States has given about half a million pounds in aid to Nepal for specifically industrial projects and the Export-Import Bank is lending a further £350,000 to the Nepal Industrial Development Corporation. However, at present only two significant industrial projects are scheduled to be built and they are a cement factory and paper plant relying on aid from the People's Republic of China.

Administrative measures have been taken to encourage industry. In 1961 arbitration by tribunal in the case of industrial disputes was introduced (Factories and Factory Workers Amendment Act). Large and small industries are exempt from the business profits tax, 25% for the large and 50% for the small. Hopefully industrial estates are being built in the suburbs of Katmandu, by Indian aid at Patan and by the Nepal Industrial Development Corporation at Balaju.

Industry in Nepal is hindered by numerous factors ranging from a lack of minerals to a lack of markets. India takes 94% of Nepal's exports and supplies 99% of her imports and is unlikely to be able to absorb the sort of industrial products which would come from Nepal's factories and which would be in direct competition with her own manufactures (e.g. Textiles). Nepal will remain a predominantly agricultural state for many decades yet.

MAP I. TRANSPORT LINKS



Transportation (Map I)

'It would be difficult to conceive of a pattern of internal transport that would more seriously hinder the achievement of political unity and coherence than does that of Nepal'.¹ Of the states bordering upon the People's Republic of China Nepal possesses one of the worst transport networks. If Katmandu wishes to send material to the eastern or western parts of Nepal the usual practice is to first go south into India and then along the Indian transport system to re-enter Nepal at a suitable point further east or west to proceed north to the destination. Thus from the viewpoint of governmental control those areas of Nepal outside the Valley of Katmandu are not within the territory effectively administered. Over the outlying areas of Nepal Katmandu can only claim to a 'de jure' political control.

As yet the only railway in Nepal is 29 miles of line from Raxaul on the Indian border to the foothills settlement of Amlekhganj. The Chinese have agreed to build a railway from Lhasa to Katmandu, and it is hoped that construction will begin in 1966. There are no other plans for railway construction which is expensive and difficult in the terrain of Nepal.

A government operated electrically powered aerial cableway runs from the railway station at Amlekhganj to Katmandu, transporting cargo in baskets. This was originally built in 1924 with a capacity of 8 tons per hour, but it has now been reduced through wear to $5\frac{1}{2}$ tons per hour. It operates 12 hours a day to deliver 60 tons. United States aid is being used in an attempt to improve the capacity of this cableway.

1. P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms'; Van Nostrand, Princeton 1963, p.108.

It was not until 1956 that Katmandu was linked by modern road with the outside world. In that year the Tribhuvana Raj Path was opened between Katmandu and Raxaul on the Indian border. A number of unpaved, fair weather roads serve the Terai, but half the bridges on these are in a state of disrepair. Further north the tracks in the interior of Nepal are either so steep or so narrow that only human portage is possible, even the mule being unable to use such pathways. A lack of bridges often causes the porter to have to make a considerable diversion, forcing him to carry more food. Often the crossing of rivers and streams is by 'dug-out' canoe. These 'dug-outs' are particularly primitive as the saw is unknown in most rural districts and only an axe is used in construction.

In 1950 a daily Patna to Katmandu air service was inaugurated, using a fairweather strip constructed at Gauchar in the Valley of Katmandu. This first tentative development using DC-3's has been expanded to other parts of Nepal with the help of United States' aid. The United States has supplied aircraft and navigational aids. The use of air transport is helping to counteract the isolationism of the areas outside the Valley of Katmandu and permit a freer flow of people and ideas. Inaccessibility fosters regionalism which is the great dividing factor in Nepal.

As might be expected the Plans have been much concerned in the development of better transportation. A start was made on road building in the first Five Year Plan, although it was a very modest attempt at improving existing routes. As part of the Three Year Plan and the second Five Year Plan in the autumn of 1961 China and Nepal concluded an agreement for the construction of a highway linking Lhasa and Katmandu. Under this agreement Peking is granting Nepal a little under \$4 million up until 1966 when

the road will be opened. There are no conditions attached to this aid and China is supplying technicians, machinery, materials and training Nepalese workers. India has been apprehensive about the construction of the Mahendra Raj Path road between Lhasa and Katmandu as she views it as a threat to her security following the aggression of China in 1962. The effect of the road when it has been completed is likely to counteract the dominance of Indian influence within Nepal.

A much more ambitious east to west road has been planned which would be 900 miles in length and do much to counteract the isolationism of those areas of Nepal outside the Valley of Katmandu. The Soviet Union promised to build this road, but no sign has yet been forthcoming that a start is being made upon it in the near future. It would therefore seem unlikely that there are to be any impressive improvements in Nepal's transport system in the foreseeable future other than the Lhasa-Katmandu highway.

²
In 1960 Tibet took 1.05% of Nepal's exports and supplied 0.60% of her imports. The opening of the Lhasa to Katmandu road should produce a rapid increase in Sino-Nepalese trade, and more especially if China's favourable attitude towards Katmandu continues. Similarly, when the Lhasa to Peking Railway has been completed and extended to Katmandu further boost should be given to Nepal's connections with China. There is a feeling within Katmandu official circles that a curb on India's predominant position in Nepal's external relations is to be welcomed. Practically all of Nepal's imports (metal goods, petroleum products and cement) come from India (£18 million p.a.) so why, Katmandu feels, should not this economic

2. Far Eastern Economic Review, Vol. 35 for March 16th, 1962, p.619.

predominance be challenged a little from the north.

Of crucial importance to any state striving for internal cohesion is an adequate transport network, preferably supplemented by other forms of communication such as radios, telephone services and telegraph lines. In this field Nepal is primitive even by Asian standards. Even given an efficient administration in Katmandu it would not be possible for the central authority to assert political control throughout the rest of the state until such time as one can move with ease about the country. There is no bigger problem facing Nepal's efforts to become a cohesive state than the physical isolation of the bulk of the country into various regions.

CHAPTER FIVE : The Political Geography of the Sino-Nepalese Boundary

After outlining the geography of the state of Nepal it becomes necessary to attempt to answer more fully the two questions posed in this thesis study. Is the state's central authority effective enough to modify the geography of the country, and do the political boundaries, notably the Sino-Nepalese line, provide a division within the landscape? Before launching upon a more comprehensive analysis based on the geographical description which has come before it is possible to give a negative answer to both questions.

'All Nepalese tribes have a sense of tribal identification which mitigates against the development of Nepalese nationalism.¹ Nepal is not an entity, nor does it appear likely to develop a sufficient feeling of likeness amongst its tribes during this Century to be able to make such a claim. Tribal allegiance always comes first and in many areas there is a total ignorance of the existence of any other sort of commitment; only in the Valley of Katmandu is the concept of loyalty to Nepal present. Practically everything about the geography of Nepal works against the welding of the state into a unit, whether it be such factors as the geomorphology, geographical position of the country, economic resources, tribal distributions or climate. Many Gurkha soldiers returning from India find that a journey such as that from Bombay to Dhanghari on the Indo-Nepalese border takes only half the time that is necessary to get to his village in Nepal although the latter part of the trip is only one twentieth the length of that through India. From Bombay to Nepal the Gurkha can travel by railway, but in Nepal he has to go by foot,

1. P.P.Karan & W.M.Jenkins: 'The Himalayan Kingdoms'; Van Nostrand, Princeton 1963, p.99.

carrying all his luggage and relying on the local population's hospitality for accommodation.

The forces working within the Nepalese state are mainly of a 'centrifugal' nature. Perhaps of dominant importance in these forces is tribal nationalism, aided by the difficult terrain and a poor transport network. Although there is a monarchy allegiance to the crown is not strong enough to be seriously counted a 'centripetal' force. Of greater importance is the growing educated elite which is wedded to the idea of 'Nepal' rather than to the tribal groups from which its members might be recruited. Similarly the determination of certain states such as India, Britain and the United States to ensure the continuing independence of Nepal is a strong force against the country's political disintegration. The viability of Nepal (i.e. the measure of effectiveness with which the state can be administered to fulfil the purposes for which it was created) is limited, but it has not reached the crucial stage of South Vietnam or Laos where the administration is on the verge of collapse.

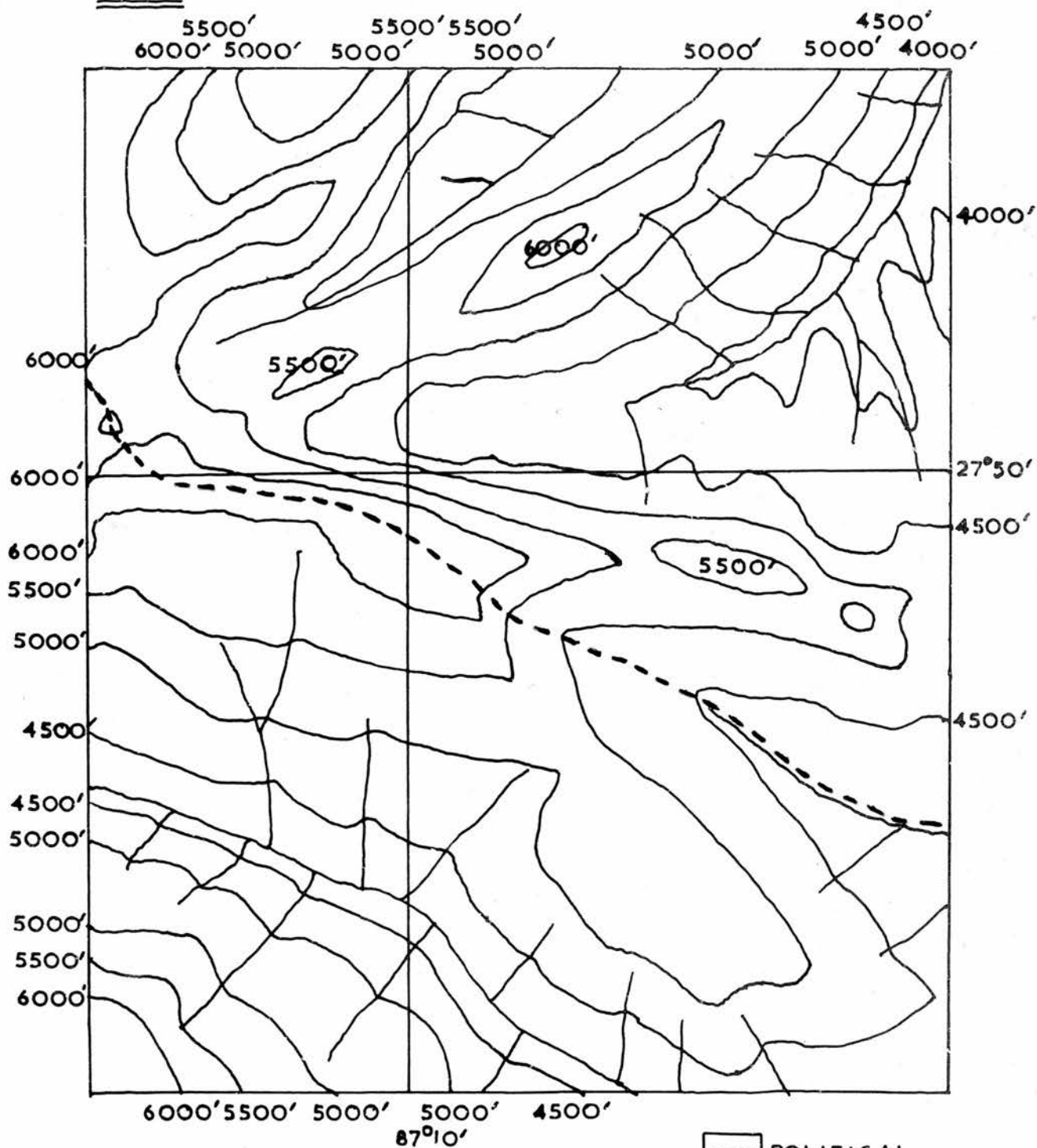
The bulk of the population of Nepal has not been alienated as in South Vietnam, but is largely indifferent or ignorant concerning the state. The situation appears to depend in South Vietnam on economic considerations, the peasant finding the material promises of the Viet Cong 'fifth column' more attractive than the economic failures of the various American-backed administrations. Within Nepal it would seem probable that the various aspects of economic development will be crucial in the effort to achieve an effective central authority based on Katmandu. There is an interaction of political and economic stability in any state, but Nepal's lack of economic develop-

ment makes this tie-up of utmost importance. Can Nepal build enough roads, educate enough of her population, counteract rural indebtedness, put an end to mercenary service, diversify the economy, intensify agricultural production, overcome the inhibitions of a limited mineral potential, attract foreign capital, restrict the birth rate, and defeat a hundred other pressing economic problems?

The government of Nepal has tended to try and place the cart before the horse by ignoring many of the economic factors and endeavouring to tackle the political problems alone. In 1960 the Panchayat system of delegated authority was established in the hope of extending effective governmental control to each village. About 3,400 village councils are elected by the villagers throughout Nepal. The village councils in turn elect members for 74 district councils who nominate members to attend 14 zonal councils. From the latter 109 delegates are sent to the National Panchayat of whose membership one third retire each year to be replaced from below. So far this system has not proven greatly effective in bringing the influence of the government to the more remote areas. It is no substitute for an adequate communications network.

Even by Asian standards Nepal is a poor country. Despite the corruption of many members of the government and the despotism of the monarchy the Nepalese administration has accepted graciously aid from more prosperous states, and most of it has found its way into economic development. Such projects as the Chinese financed Lhasa to Katmandu road will help to overcome the problem of isolation in Nepal's northern territories, even if it does risk an excessive increase in Peking's influence within Nepal. It is unfortunate that the Soviet proposal of an east to west highway has

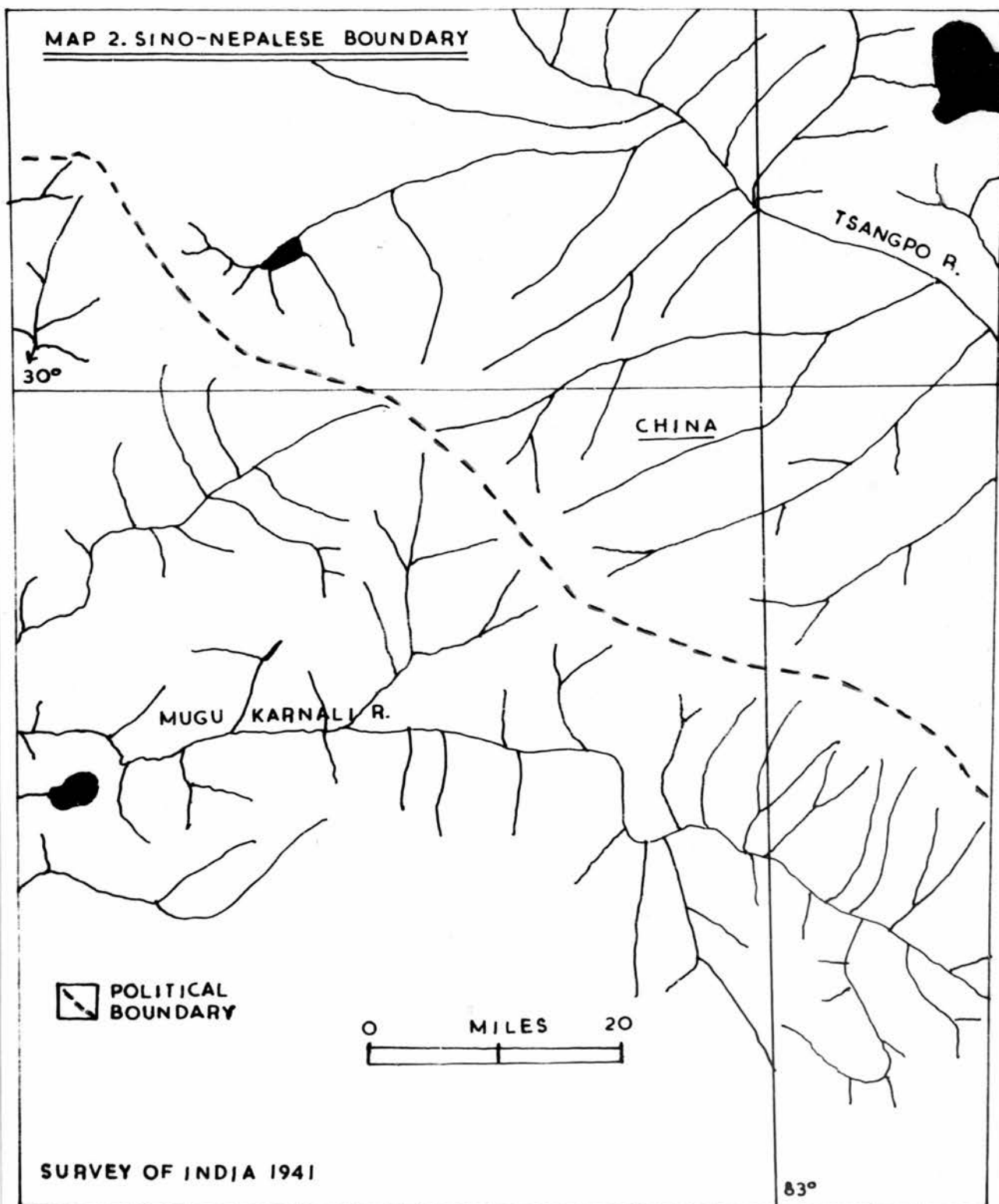
MAP 1.



AFTER R.G.S.'MT. EVEREST REGION'1961.
1"=1 MILE

--- POLITICAL
BOUNDARY

MAP 2. SINO-NEPALESE BOUNDARY



as yet not materialised. The breaking down of isolationism, the increasing effectiveness of the central authority within the state area, and economic development are all connected to the improvement of communications, and notably the transport network. If the trip from Katmandu to the Sherpa areas, for example, only took hours instead of days the Sherpas would not only be less insular in their outlook, but would also be more of an economic asset to the state whilst themselves benefiting more economically. As Britain has been finding in the modern world there is a heavy payment for a transport system which is not as good as it should be.

Particularly along the Sino-Nepalese boundary is Katmandu's administration tenuous. The physical geography of this area hinders easy movement to a greater extent than perhaps anywhere else in Nepal. Despite the signing of a boundary agreement with China Nepal's control of the border area is only nominal. The boundary itself has been demarcated by a number of pillars. In the main the line follows mountain crestlines (Map I) and watersheds (Map 2) and can be classified under Boggs' 'Physical' category or Hartshorne's 'Subsequent'. During the first part of the 1950's when she was endeavouring to establish more effective control within Tibet China did endeavour to close the Sino-Nepalese boundary, but there was reputed to have been a great deal of smuggling between northern Nepal and Tibet. With increasingly good relations between Katmandu and Peking there has been a relaxation by the Chinese of their surveillance of their side of the boundary. The Sherpas and Bhotiyas are astride the boundary which limits its effectiveness as a division within the landscape, but with the building of better roads to the area and the increasing determination within Katmandu to bring the other areas of Nepal within the area of effective administration it would be expected that there will develop a certain amount of divergence

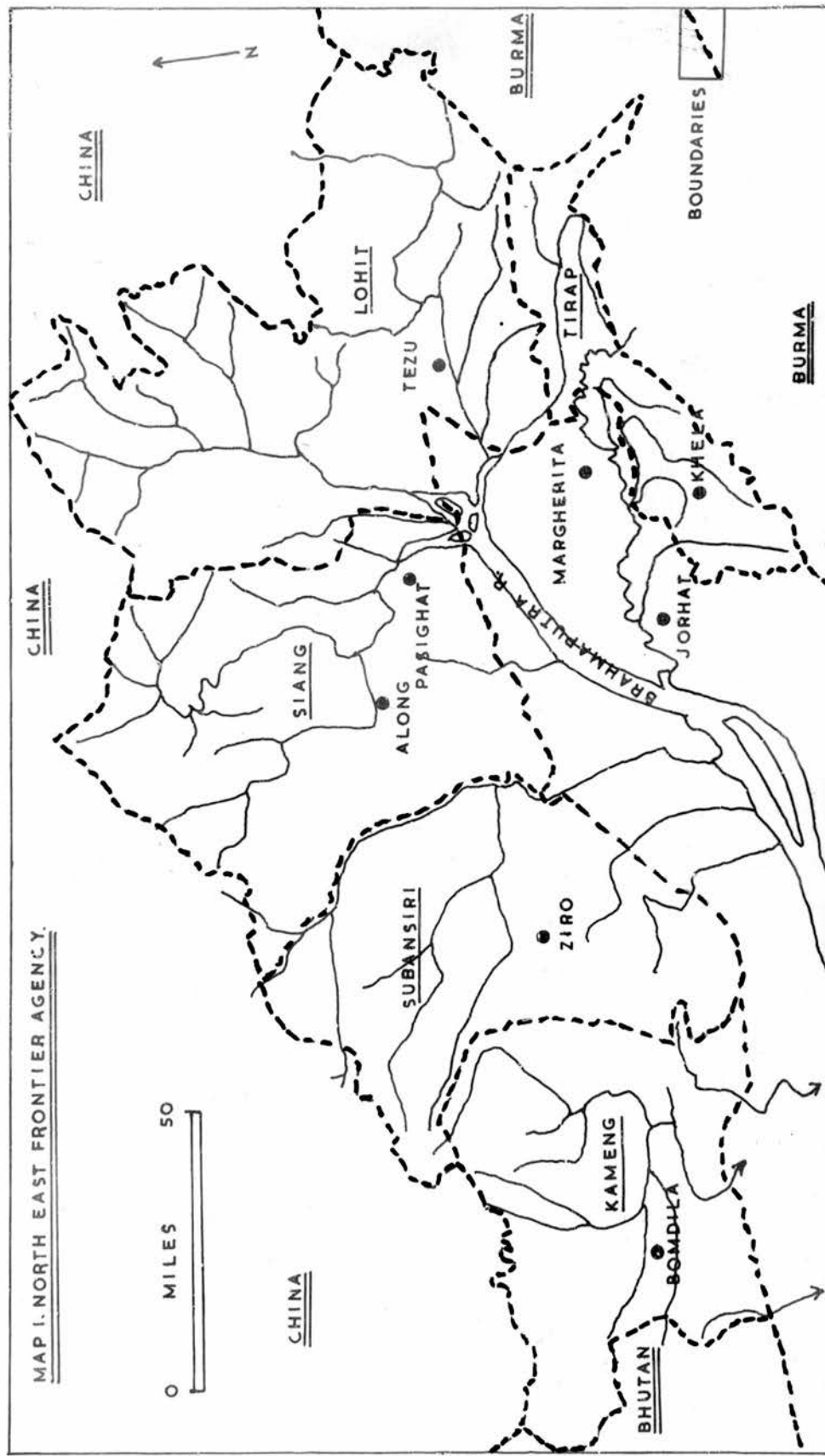
between the Sherpas and Bhotiyas on each side of the boundary. It will be a long process of assimilation for the Nepalese administration will continue to be weak in this area for many years, and the Chinese apparently no longer feel a need to exert their authority right up to the boundary.

Neither the Tibetans nor the Nepalese tribesmen who live in the boundary area are adherents to the concepts of the People's Republic of China and Nepal. The effectiveness of a boundary as a division depends upon the attitudes prevailing amongst the people each side of it. Tibetan hostility to the Han administration is well known. The Sherpas and Bhotiyas are of Tibetan origin. Further, the concept of the Nepalese state has not been advertised enough within the Nepalese tribes to even begin to challenge allegiance to the tribe. The Sherpa or the Gurung might be willing to fight for his tribe or for a higher standard of living, but it is doubtful if he would be willing to risk his life for the state of Nepal as many millions of Britons were for the United Kingdom during the first two 'volunteer' years of World War I. 'Nationalism' is an idea which is taught; if it is already there amongst the older generations as within a tribe then the task is much easier and more certain. Nevertheless, an efficient propaganda machine with ready access to the people concerned can 'sell' the idea of nationalism. If Katmandu was in easy contact with the northern boundary areas, and was willing to make the effort in perhaps a generation the idea of 'Nepal' could be firmly established amongst the tribesmen.

But the state of Nepal is underdeveloped both economically and politically and tribal allegiances go practically unchallenged except in the immediate vicinity of the central government. Similarly, Peking's control of her Tibetan borders is not as effective as that with Hong Kong or in the

Manchurian area. Also Peking is apparently willing to administer the zone with Nepal more casually than her border with India. Under these circumstances it can be restated that the central authority within Nepal is having little effect upon the geography of the state area, and the boundary does not provide a division within the landscape.

MAP I. NORTH EAST FRONTIER AGENCY.



SECTION FIVE : The North East Frontier Agency of India

Major Neutralist Borderland

1

CHAPTER ONE : Historical Development

Pre-19th Century A.D.

The North East Frontier Agency territories are the least known in the Republic of India. As such writing about them presents many problems, the most notable being often a lack of basic information. The historical background prior to the arrival of British administration in the Nineteenth Century illustrates well this difficulty; it is shrouded in mythology and is full of as yet unanswered questions.

A number of ruins in the foothills of the North East Frontier Agency suggest that the influence of the ancient rulers of Assam must have encompassed the tribesmen living closer to the plains. Local remains in Lohit (Map I) are traditionally assumed to mark King Bishmak's capital of Bishmaknagar whose daughter in Hindu mythology is reputed to have been carried away by Lord Krishna on the eve of her wedding. The Bhalukpang castle ruins in Kameng are claimed by the Akas as the home of their ancestor Bhaluka who was a grandson of the Raja Bana, a figure who was, according to myth, defeated by Lord Krishna at a place called Tezpur. The Kalita King Ramachandra was reputed to have fled to the Dafla area of Subansiri from the plains and there re-established his kingdom. Lohit is also full of legend including a passage through the hills on the lower reaches of the Lohit River where Para-

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1. The following references have been of importance in this chapter:
J.R.Aitchison: 'A Collection of Treaties, Engagements, & Sanads Relating to India & Neighbouring Countries'; Superintendent of Government Printing, Calcutta 1933; O.Caroo: 'Review of Report of Officials of the Governments of India & the People's Republic of China on the Boundary Question'; Geographical Journal Vol. 127, Sept. 1961; W.Kirk: 'The Inner Asian Frontier of India'; I.B.G. Transactions & Papers No. 31, 1962; V.Elwin: 'A Philosophy for the North East Frontier Agency'; North East Frontier Agency Administration, Shillong 1959.

surama struck a single blow of his axe, this is a place of Hindu pilgrimage. What all this local legend does imply is that from earliest times the hill tribes had a certain amount of contact with the plains, and that the area of the North East Frontier Agency acted as a refuge for the defeated and the fugitive from the zone of higher culture to the south.

It would be expected that the Mishmis worked on the temples and forts of Lohit and the Akas and the Daflas on those of Kameng. One of the earliest references to the hill tribes is in the chronicles of Shihabuddin who accompanied Mir Jumla on his invasion of Assam in 1662, A.D. Apparently at this time such tribes as the Dafla did not acknowledge the authority of the Ahom Raja of Assam, but were aggressive enough to invade his dominions. Under these circumstances the Ahom kings adopted a policy of conciliation tempered with displays of force towards the hill tribes. The object of the Ahom Raja was to contain the tribes in their hill country and thus protect from their ravages the gentler plains people. Only when there were particularly aggressive raids into their territories did the Ahom kings embark on military expeditions against the tribes. These expeditions were often costly and fruitless. 'When the Raja Udayaditya Singha proposed to punish the Daflas of Subansiri for carrying off a number of Assamese men, women and children, his Prime Minister declared that 'the Dafla miscreants can be captured only if an elephant can enter a rat-hole.' The Raja ignored the warning and his expedition was defeated with heavy losses of men and provisions.'

2. V.Elwin: 'A Philosophy for the North East Frontier Agency'; North East Frontier Agency, Shillong 1959, p.2.

3

Nineteenth Century

The Indian administration of the bordering plains prior to the arrival of the British had therefore tried to quarantine the more warlike tribes of the North East Frontier Agency. But by 1838 when Britain's interests gained control of Assam from Purander Singh the authority of the Ahom kings had broken down and the plains' government was weak. Therefore the policy of containment at the beginning of the Nineteenth Century was not functioning and the tribal raids were much more frequent. The first tentative exploration and survey by the British East India Company had been made in 1826, and from 1844 onwards attempts were made to reach agreements with the local tribal chiefs from the plains of Assam to the crestline of the Himalayas. British outposts were established in the foothills and used as bases for punitive expeditions into the interior. Visitors were resented by the tribesmen and despite explorations by Britons little impact was made upon the northeastern areas.

It was not until 1882 that the British abandoned the Ahom kings' traditional policy of containment of the tribes within their foothill territories. In that year the first tentative steps were taken towards setting up some sort of administration with the appointment of J.F. Needham as an Assistant Political Officer. Needham held this post until 1905 during which time he embarked upon a number of extensive trips into areas until then unexplored and thereby brought knowledge of British administration to

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3. In dealing with the North East Frontier Agency during the Nineteenth and Twentieth Centuries the following have been of particular use: 'The Sino-Indian Boundary Question', Foreign Languages Press, Peking 1962; Indian Ministry of External Affairs, White Papers I, II, III, IV, V & VI, Notes & Memoranda & Letters Exchanged & Agreements Signed Between the Government of India & China; and 'Atlas of the Northern Frontier of India', New Delhi 1960.

tribesmen who until this time had been totally unaware of the existence of British power in India.

Another method employed during the Nineteenth Century by a Britain loathed to commit herself to an expensive extension of her power into the North East Frontier Agency was the use of trade fairs to create a feeling of friendliness amongst the tribesmen. These fairs were held at various centres and might attract as many as 3,500 tribesmen, although the Adis refused to attend.

During the Nineteenth Century the British administration had not consolidated adequately enough its position in the newly acquired lands of Assam to gain effective control of the difficult country and hostile peoples of the North East Frontier Agency. In fact it could never be claimed that British administration within the hill tribes was other than of a nominal kind.

Twentieth Century

Efforts at creating better relations between the rest of India and the hill tribes were marred by the Adis' murder of Williamson and Gregorson in 1911 when they were in Siang. In 1912 the Topographical Survey was very active in the tribal areas and managed to map much of the interior. By 1912 political administration could claim to have some sort of foothold in the whole of what is now the North East Frontier Agency. In 1919 the administration was divided down the middle into the Balipara Frontier Tract and the Sadiya Frontier Tract. In 1942 the Tirap Frontier Tract (Map I) was detached from the Sadiya Frontier Tract, and in 1946 the Balipara Frontier Tract was divided into the Se-La Sub-Agency and the Subansiri Area. In 1948 the remaining part of the Sadiya Frontier Tract became the Abor Hills and the Mishmi Hills. The Naga Tribal Area was at first administered as

part of the Naga Hills, but it became a separate territory of Tuensang in 1951. It was not until 1954 that the Frontier Divisions were given their present names of Kameng, Subansiri, Siang, Lohit, Tirap and Tuensang. However, in 1957 Tuensang was united once more with the Naga Hills to become the new Naga Hills and Tuensang Area.

At present the North East Frontier Agency is constitutionally part of Assam and is administered by the Ministry of External Affairs with the Governor of Assam acting as Presidential agent. Each of the Divisions is under a Political Officer with control co-ordinated in Shillong. The Subdivisions are under Assistant Political Officers who have under them Base and Area Superintendents.

Perhaps the two most significant dates with regard to the North East Frontier Agency during this Century have been 1947 and 1949. Until 1947 India was under British administration and up to 1949 China was a weak state. In 1947 Britain granted India independence and in 1949 China came under the control of a vigorous Communist administration; a weaker power ruled in Delhi and a stronger one in Peking. There was a reversal of the positions which had prevailed since the Nineteenth Century A.D., namely India became the less strong state.

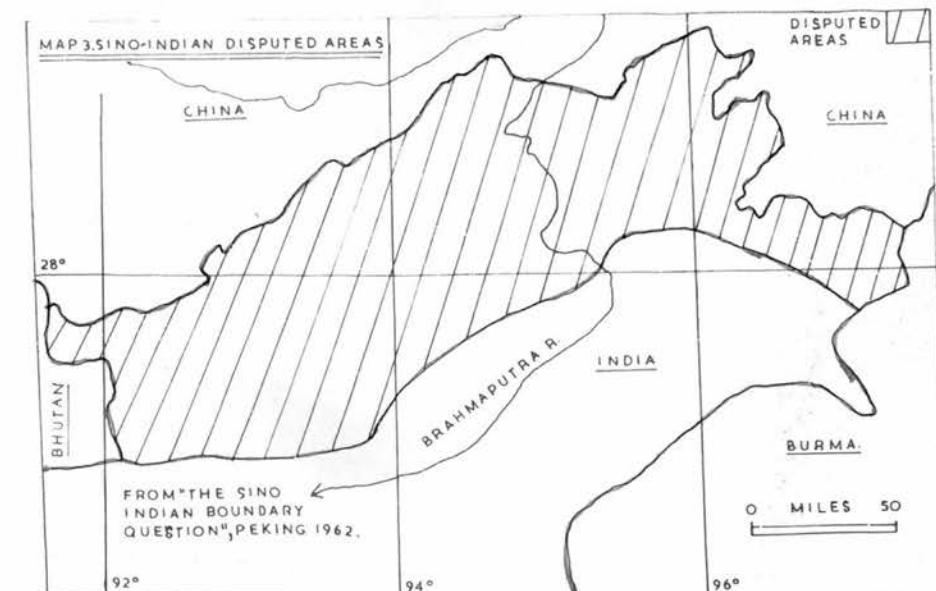
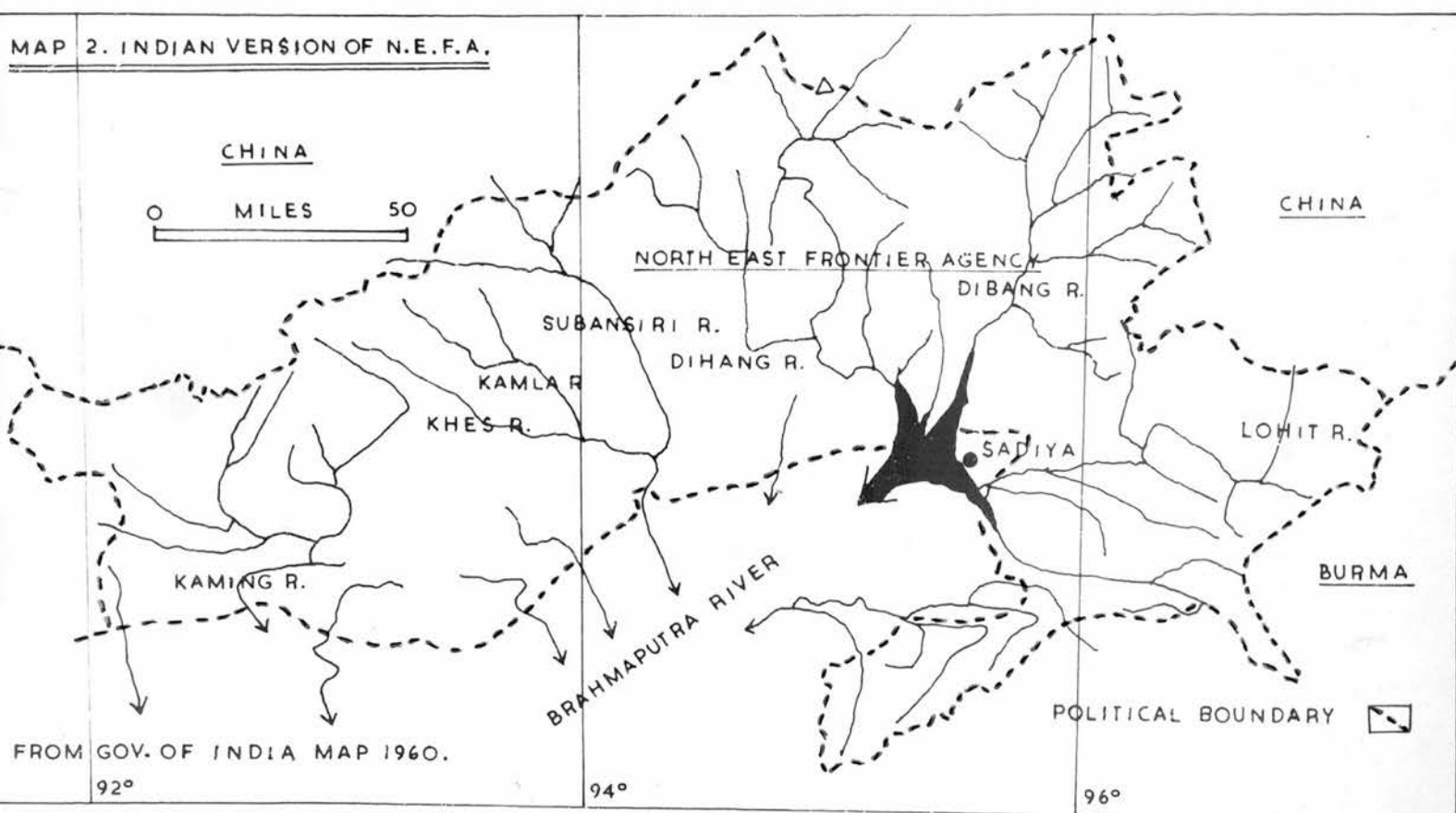
The North East Frontier Agency under British rule in India was a broad frontier zone between the British territories and China. This was not a particularly new role for the tribal areas to play as for centuries neither China nor India could claim to have had any control over the Agency. It had been a zone of independent tribal territories which had provided a useful barrier during periods of Chinese or India strength, but had an independent will of its own which demanded its containment during times of weakness in the plains. Sino-Indian relations in this frontier zone have been

complicated by a change in attitude on the part of the two states; 'since World War II, however, both India and China have sought to increase the measure of direct control over their respective spheres of influence in the frontier zone.'⁴ India has attempted to directly control the land up to her version of the boundary which stretches for 710 miles from Bhutan to the Talu Pass at the Sino-Indian-Burmese boundary junction.

The Sino-Indian boundary was delimited in the North East Frontier Agency which makes India's case for the adherence to this line a better one than her claims in the Northwest. In 1913 a conference was convened at Simla in India at which Britain was represented by Sir Henry McMahon, China by Ivan Chen and Tibet by Lonchen Shatra. The resulting delimitation was known as the McMahon Line and followed the Himalayan crest from the northeastern corner of Bhutan to the Isu Razi Pass in northern Burma. At the time of the agreement there were no objections raised by the Chinese and the map showing the delimitation was signed by all three representatives. The Chinese objections of May 1st. and June 13th. 1914 were directed at the boundary between Outer and Inner Tibet only, as was that of May 30th. 1919. No objection was raised concerning the Sino-Indian boundary. Similarly, since 1960 the Chinese have recognised the 120 mile stretch of the McMahon Line between China and Burma as the Sino-Burmese boundary.

What of the boundary of the North East Frontier Agency as claimed by India and China? 'The Indian side demonstrated that the boundary shown by India was the natural dividing line between the two countries (i.e. India and China) ... if mountains form natural barriers, it was even more logical that the dividing line should be identified with the crest of that

4. W.Kirk: 'The Sino-Indian Frontier Dispute'; Scottish Geographical Magazine, Vol. 76, No.1, 1960, p.4.



range which forms the watershed in that area. Normally where mountains exist, the highest range is also the watershed; but in the few cases where they diverge, the boundary tends to be the watershed range.⁵ The Chinese claim was not a modest one 'but involved a vast stretch of territory of about 32,000 square miles, the alignment being right down at the foothills',⁶ (Maps 2 and 3). As Kirk⁷ so aptly pointed out India did not follow the watershed principle of boundary delimitation at all times' ... The Indian alignment lays no claim to ... the great longitudinal valley of the upper Brahmaputra or Tsangpo, or to those sections of the valleys of the Dangs, Subansiri, and Lohit rivers which lie to the north of the McMahon line. To include all the territory draining to the Indian Ocean as part of India would seriously impinge on the traditional Tibetan sovereignty, and yet would be the logical outcome of the absolute application of the watershed principle'.

The Indian alignment follows the crest of the Great Himalayas, crossing the Tsari River and the Dihang River (Map 2) to continue along the watershed of the Dihang and its tributaries before crossing the Lohit River to reach the junction of the Burmese-Chinese-Indian boundaries. The Chinese version (Map 3) starts at the southeastern tip of Bhutan and follows the line where the southern edge of the Himalayan foothills meets the plains of the northern bank of the Brahmaputra River. The boundary crosses the Subansiri and Brahmaputra Rivers and continues in a southeasterly direction to a more southerly trijunction of the Burmese-Chinese-Indian boundaries.

⁸
Rao has put forward with enthusiasm India's legal arguments for her version

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5. Report of the Officials of the Governments of India & the People's Republic of China on the Boundary Question; Ministry of External Affairs, Delhi, February 1961, pp.235-36.
 6. Ibid, p.237.
 7. W.Kirk: 'The Inner Asian Frontier of India'; I.B.G.Transactions & Papers No. 31, 1962, p.155.
 8. K.K.Rao: 'The Sino-Indian Boundary Question & International Law'; The International & Comparative Law Quarterly, April 1962 pp.375-415. The five points are from p.411.

of the boundary delimitation. He gives five criteria:

- 1) Historic rights derived from close association with, and possession of, these areas dating long before the Christian era.
- 2) Conformity of India's northern frontier with the principles of international law and the international practice concerning natural boundaries.
- 3) Treaty and Custom, which clearly demonstrate that both India and China accepted these frontiers; India has openly exercised sovereign powers in the frontier area at the time when China started making claims and intrusions.
- 4) In particular, the Simla Convention of 1914, which is binding on India, Tibet and China.
- 5) Recognition by China of the Sino-Indian frontier as asserted by India.

As it is hoped it has been shown India's association with the tribes of the North East Frontier Agency can hardly be described other than as tenuous, although it has been a more effective one than that of China with regard to the area. Similarly, the use of the term 'natural boundaries' is one which it is difficult to accept as there is no such phenomena, it is assumed in this case that the author means the use of certain features in the landscape as lines along which to delimit a boundary. As has been seen in the strictest sense the boundary in the North East Frontier Agency does not adhere to the 'natural boundary', and there is perhaps some justification in stating that the Chinese use of the line between the foothills and the plains is also an acceptable 'natural boundary'. Without a doubt the trump card in the Indian hand, and the one reason why the Indian case is so much stronger than the Chinese in this section of the Sino-Indian border, is the

Simla Convention of 1913-1914. Other than the use of force as in 1962 there is no effective Chinese reply to this as even claims of Imperialist exploitation do not stand up due to the lack of Chinese protest following the McMahon delimitation. All other claims by India and China as to cultural affinities or physical resemblances of the tribesmen to either the Indians or the Chinese will, it is hoped, be proven to have little basis later in this Section.

From the geographer's viewpoint one of the interesting developments in the Sino-Indian border dispute was the use of maps to back up territorial claims. China used maps published by the Survey of India in 1917 and later, and a map in the 1929 edition of the Encyclopaedia Britannica. The Indians quoted the maps of the McMahon conference at Simla. For the total length of the Sino-Indian boundary the Indians quoted 36 official Indian maps and 8 Chinese, and the Chinese 13 Indian. The use of maps in such disagreements can be deceptive, for example such privately published maps as the one in the 1929 Encyclopaedia Britannica are not of much value. 'The value of cartographic evidence in international boundary disputes rests ultimately on the degree of accuracy of topographic survey obtaining at the date of its compilation, the extent to which it represents the official point-of-view of the state concerned, and the measure of its conformity with the principles of delimitation laid down in the definitive treaties'.⁹ The Indians had an advantage over the Chinese with regard to their cartographic evidence in relation to the North East Frontier Agency as they were able to use their past mapping as proof of their greater claim

9. W.Kirk: 'The Sino-Indian Frontier Dispute'; Scottish Geographical Magazine, Vol. 76, No.1, 1960, p.11.

to having had more administrative control in the Agency.

In the autumn of 1962 the Chinese resorted to the use of force in an attempt to resolve the Sino-Indian boundary dispute. Their armies advanced within range of the Brahmaputra River before stopping. Indian opposition to the Chinese was ineffectual, as might be expected of a state dedicated to peace, and ill-prepared. A cease fire followed at which it was suggested by the Chinese that there should be a withdrawal of troops 20 kilometres behind the line held by India and China on November 7th. 1959. This affects the Northwestern boundary of India far more than the North East Frontier Agency as it was not until the spring of 1962 that India made her administration in Ladakh anything like effective. India wanted a withdrawal 20 kilometres behind the line held on September 8th, 1962 which would make her position further north. Despite India's unwillingness to comply with China's suggestion Chinese troops did fall back to the 20 kilometres area behind the line held in 1959. This has once more left much of the North East Frontier Agency in the control of India, and a stalemate at present prevails. In fact China appears to be less interested in the North East Frontier Agency than in those areas of Aksai Chin in the Northwestern boundary which hold the vital Tibet-Sinkiang highway.

India has a better claim to the North East Frontier Agency than China due to the Simla Convention and her longer period of administrative activity in the area. But the elite being educated at Indian universities and who are returning to their tribal areas may find incorporation in either the Republic of India or the People's Republic of China unacceptable. They have the mutinous example of the Nagas to suggest the possibility of self-determination¹⁰ for the peoples of the North East Frontier Agency. India's 'watershed'

10. A watershed is a line separating two contiguous drainage areas.

boundary may have no more relevance than China's foothills delimitation. The North East Frontier Agency is something of a distinctive entity owing little to Tibet (The Tibetans call the tribesmen 'Lopas' or 'Southern Barbarians') or India. The tribes of the North East Frontier Agency may prove, like the Nagas, unwilling to be subservient to Indian nationalism. After her defeat by China in 1962 India is no longer considered able to protect the peoples of the Himalayan area and so even an offer of a federal arrangement may be unacceptable to the educated amongst the tribesmen. Already the Nagas have suggested the possibilities of independence from both India and China. India's policy in the area has lacked coherence, and China may yet prove to be uninterested in the Agency if she procures what she desires in the Northwestern area.

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CHAPTER TWO : Physical Characteristics of the Land

The North East Frontier Agency is bordered in the north by Tibet, in the east by Burma, in the south by India and in the west by Bhutan. From Bhutan across the Agency to Burma is about 355 miles, whilst its widest north-south part is 110 miles. For the purpose of this study the Indian administrative divisions of Kameng, Subansiri, Siang, Lohit and Tirap represent the area dealt with although it should be appreciated that the boundary claimed by China excludes Tirap, and the southern parts of Lohit and Siang (Maps 1 and 3 in the previous chapter).

It is difficult to deal with the physical geography of the North East Frontier Agency area as so much of it is imperfectly known. Similarly, there is a need to view the Agency in the larger context of the Himalayas as a whole and this inevitably involves a certain amount of repetition, notably of material dealt with in the previous section on Nepal.

It is generally agreed that during Mesozoic times the area which is now the Himalayas was then occupied by the geosynclinal Tethys Sea. There is a contrast in the Tibetan area which is covered with sediments laid down under the Tethys Sea, and the rocks of the Himalayan core which contain ancient and more recent crystalline intrusives and sedimentaries similar to those of India. There were three phases in the transformation of the Tethys geosyncline, first the upthrust of the central axis of ancient crystalline and sedimentary rocks in Oligocene times, then in Miocene times a movement

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1. Of importance in this chapter have been the following texts: J.B.Auden: 'Traverses in the Himalaya'; Records of the Geological Survey of India Vol.69, Pt.2, Calcutta 1935; N.Ginsburg (Editor): 'The Pattern of Asia'; Prentice-Hall, New Jersey 1960; S.D.Misra: 'The Sino-Indian Dispute: A Geographical Analysis'; Indian Geographical Journal Vol.34, Pt.3/4 1959; E.H.Pascoe: 'A Manual of the Geology of India & Burma'; Government of India, Delhi 1950; & O.K.H.Spate: 'India & Pakistan', Methuen, London 1957.

which led to folding, and lastly the post-Pliocene phase which is still in progress and which has affected notably the Siwalik sediments.

The Great Himalayas extend in a south facing arc from the Indus to the Brahmaputra. Most of the peaks over 25,000 feet are of granites and gneisses, but much of the area, including that of the North East Frontier Agency, is made up of old metamorphics. The Great Himalayas have a comparatively gentle and rounded slope into the Yalu Tsangpo furrow, but fretted southern face. The Dihang (Brahmaputra-Tsangpo) has cut an impressive gorge through the Himalaya range. There appears to be a pushing back of the watershed due to the greater rainfall on the southern slopes of the Himalayas. The eastern culmination of the Great Himalayas is the 25,000 feet high Mancha Barwa overlooking the Dihang (Map 2 in previous chapter), but it seems probable that it continues eastwards at a lower elevation to be cut later by the upper Salween River, upper Mekong River and upper Yangtse River. The Indian delimitation of the North East Frontier Agency is therefore along the Great Himalayas and the continuation of this range following the interruption of the Dihang gorge (Brahmaputra-Tsangpo).

Although this eastern section of the Himalayas 'is very little known geologically and even geographically,'² it appears to be similar to the Northwestern area. 'The post-Archaeon rocks of the Assam Plateau are unfolded and horizontal, ... the Tertiary rocks are complicated, overturned, and overthrust, both in the Himalayan foothills and their strike continuations, the Patkai and Naga ranges (further south)'³. This suggests that

2. O.K.H. Spate: 'India & Pakistan'; Methuen, London 1957, p.20.

3. R.D. Oldham: 'The Making of Indian Geography'; Geographical Journal, Vol.3, 1894, p.189.

the Brahmaputra Valley has been forced down between the Shillong Plateau to the south and the Himalaya folding to the north.

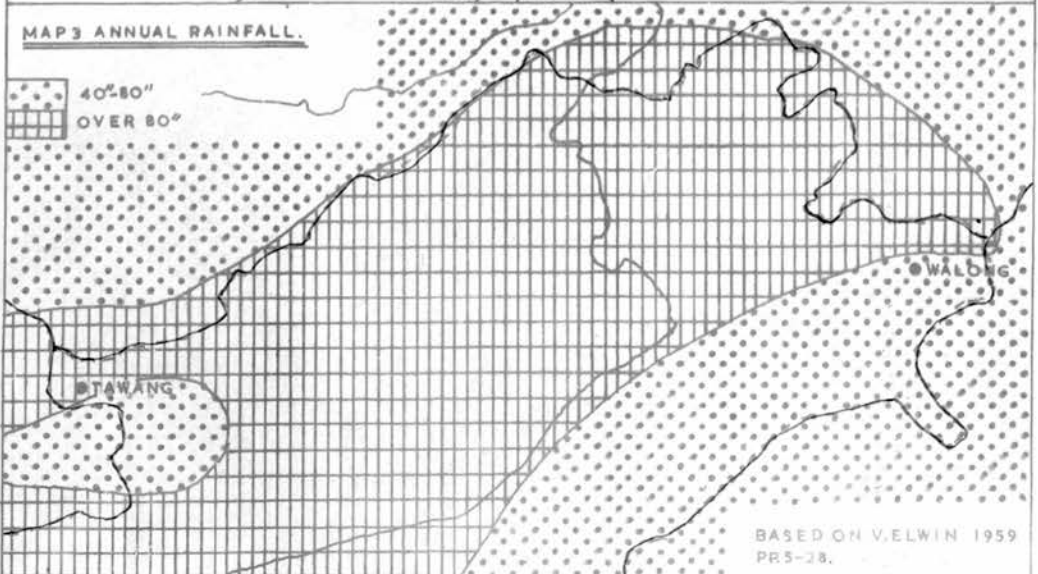
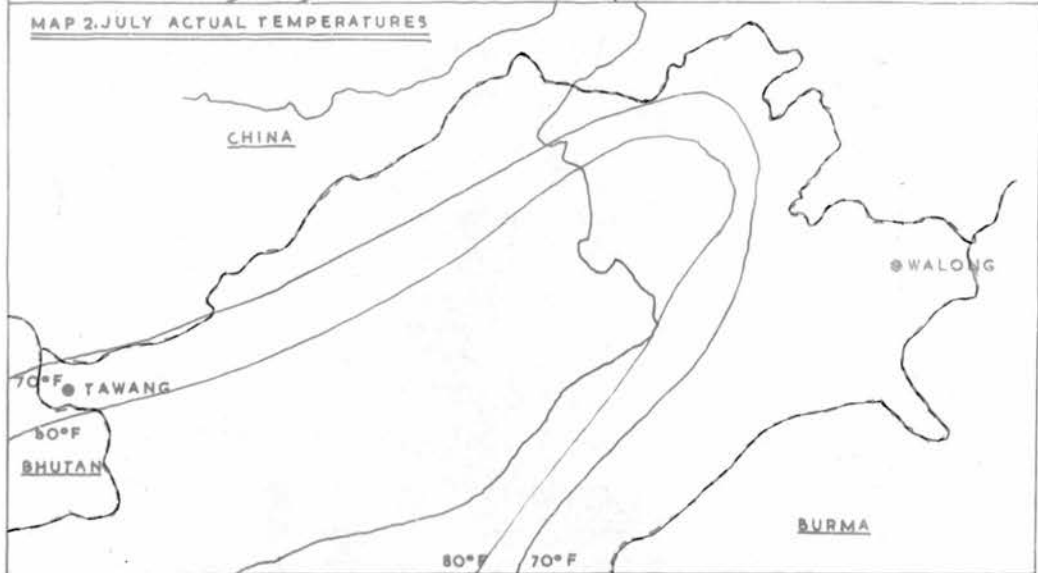
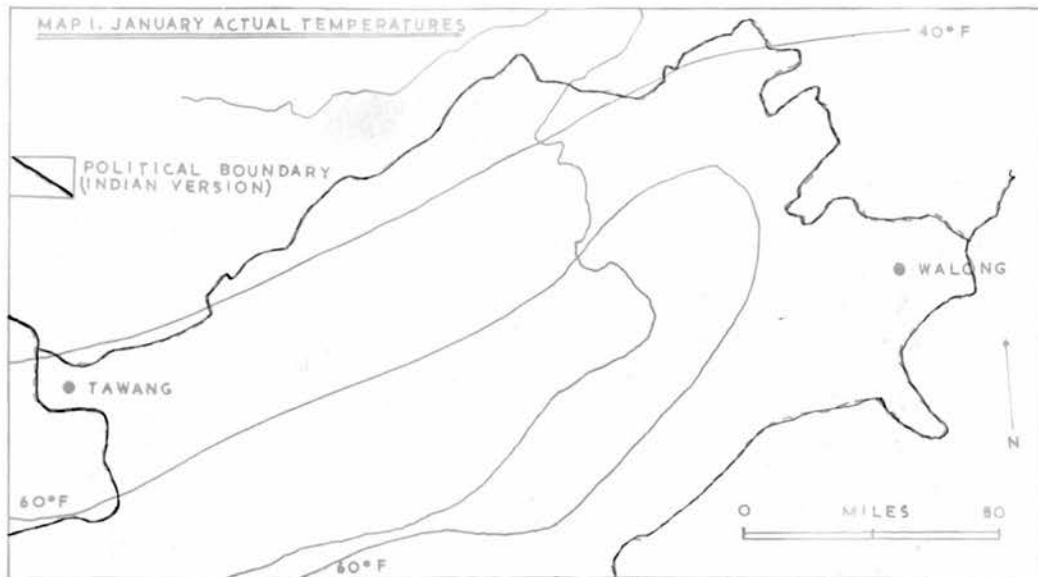
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Writing of the eastern section of the Himalayas Wager⁴ concluded that it had been produced by two different processes in two stages, 'The first stage was the production by horizontal compression of an elevated plateau in approximate isostatic equilibrium. This plateau is essentially the present plateau of Tibet, but when formed it extended further south over the region which is now the Himalaya. The second stage, which is presumably still going on, is one of vertical upwarping of the edge of the plateau to maintain approximate isostatic balance as the rivers cut deeper and deeper into its edges. The second stage is the one which has produced the extra height of the Himalaya mountains above the plateau of Tibet.'

With regard to physical geography what the Indian boundary can claim to do is follow a line which roughly divides the sub-montane area of the tribal foothills from the high plateau of Tibet. The Chinese delimitation more or less coincides with a line marking where the foothills end and the plains of the Brahmaputra begin. Having used the Himalayas India has perhaps the advantage of greater visual impact in her boundary delimitation.

The climate of the North East Frontier Agency is mainly affected by influences from the south as the Himalayas have shut off the area from the air masses to the north except in the upper air. The seasonal rhythm is that of the Indian subcontinent with two seasons based on rainfall over most of the Agency; there is the rainy season from March to September and winter from October to February. The rainfall is mainly governed by the

4. L.R.Wager: 'The Arun River Drainage Pattern & the Rise of the Himalayas'; Geographical Journal, Vol. 89, 1937, pp.249-50.



BASED ON V. ELWIN 1959
PR5-28.

alternation of the monsoon.

The colder weather starts at the end of October and persists until the beginning of February. At this time of the year the general movement of air in northern India is down the Indus and Ganges valleys to the low pressure area south of the equator. As Map 1 demonstrates temperatures are comparatively low throughout the North East Frontier Agency, but depend on altitude more than anything else for the differences within the area in January. There is a large diurnal range as the skies are clear and bright during the day with a temperature that rises considerably between about 11 a.m. and 2 p.m., but which drops rapidly during the evening to produce cold nights with the temperature below freezing. The morning insolation amongst the hills is often delayed in its effects by a thick blanket of fog during this season.

At the beginning of March temperatures start rising and pressure decreases. There are showers in late March, but heavy rains start in May and last to the end of August and are associated latterly with the Southwest Monsoon. Temperatures in the Agency in July are again affected mainly by altitude with over 80 degrees, F. in the plain areas decreasing to below 70 degrees F. in the higher Himalaya areas and the Tibetan plateau further north.

September has less rain and prolonged dry breaks. Except for the Tirap area of the southern part of the North East Frontier Agency and part of the Agency bordering upon Bhutan the annual rainfall is over 80 inches and in most areas is between 100 and 200 inches. The Himalayas tend to block the movement of the monsoonal rains northwards so that Tibet is much drier than most of the North East Frontier Agency. (Map 3). The highest rainfall is recorded in the months of June and July when the Southwest Monsoon is at its height. There is an east to west decrease in rainfall along the Himalayas.

MAP 4 GENERALIZED SOIL MAP

 YELLOW & RED SOILS.
 SLIGHTLY PODSOLISED
 & GRITTY.
 ALPINE (GRITTY MEADOW
 TO SNOW & ICE).
 POLITICAL
 BOUNDARY

AFTER O.K.H. SPATE 1957

MAP 5 VEGETATION

 TROPICAL WET EVERGREEN
 SUBTROPICAL WET EVERGREEN
 TROPICAL SEMI-EVERGREEN
 TEMPERATE
 ALPINE

BASED ON O.K.H. SPATE 1957

The Upper Assam Valley acts as a funnel with moist air driven up the Brahmaputra.

The rainfall of April and May is the outcome of Northwesterly winds and is cyclonic. This may bring over 10 inches of rain, but does not compare with the Southwest Monsoon when it breaks with regard to intensity of precipitation. However, this phenomena of the early rain brought by the Northwesters does make the climatic regime of Northeastern India a little different to that of the rest of the Subcontinent.

The soils of the North East Frontier Agency have not been mapped so that Map 4 (~~previous chapter~~) is a highly generalised picture of the situation prevailing. Most of the area is covered by red and yellow soils with a tendency towards leaching and becoming more gritty with a rise in elevation. These soils extend over into China and Burma, although they are modified in the higher areas where they may eventually become little more than gravel. The red soils of the higher areas of the Himalayan foothills found between about 6,000 and 8,000 feet are slightly podsolised and increasingly gritty. The Alpine soils of the Himalayan slopes range from a gravelly meadow soil at the lowest level to ice and snow above. There are numerous variations of this basic classification according to local differences in relief, parent rock and climate.

The original vegetation over most of the area of the North East Frontier Agency was forest of one type or another. The exception is the northern boundary with China (Indian delimitation) where the Himalayas and Tibetan Plateau have an Alpine vegetation. At about 9,500 feet the vegetation becomes a shrubby forest of rhododendrons, birches, and junipers grading into low evergreen scrub on the Indian side and into open xero-

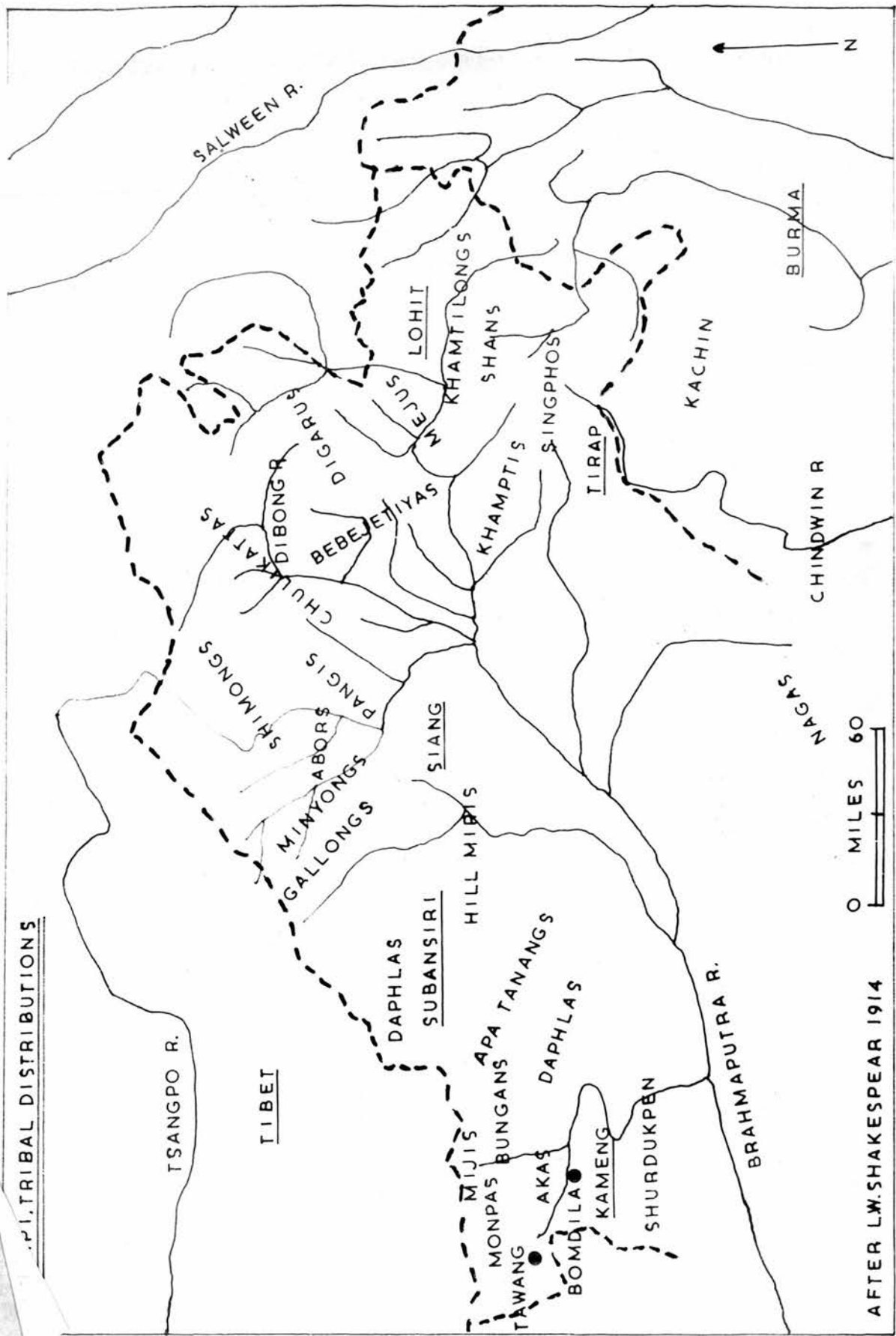
phytic bush on the drier Tibetan side of the Himalayas. Above 12,000 feet there is grass followed by bare rock. Below the Alpine vegetation there is a band of temperate forest with scattered oak and ash and a predominance of junipers and deodars. At 3,000 to perhaps 7,000 feet occurs subtropical wet hill vegetation in which there is a predominance of evergreen oaks and chestnuts. Bamboo and creepers are common and in some of the areas over 5,000 feet there are pine trees. Below this there is tropical evergreen (wet) forest and semi-evergreen (i.e. predominantly evergreen) forest (See Map 5 in ~~the previous chapter~~). This is typical rainforest and is found up to 3,500 feet. It is best developed in those areas with over 120 inches of rain per annum and a short dry season. In the wetter areas the rainforest is dense and reaches heights of 150 feet with an undergrowth of bamboo in those places where there is a break in the overhead cover. 'Due to heavy and continuous rains for the greater part of the year, luxuriant evergreen vegetation is the most characteristic of this region. Thick jungles, with tall, stout trees with long creepers around them, are found everywhere.'⁵

The physical geography of the North East Frontier Agency has been such as to encourage the isolationism of the tribes living within the area. Communication with the plains of India is perhaps a little easier than with China. Neither of the boundary alignments favoured by the two conflicting states in this region have any outstanding merits with regard to the physical characteristics of the Agency. The problems of physical geography as they relate to the efforts of either India or China to integrate the Agency within the state administration have not been tackled adequately from Delhi or Peking. The

5. L.R.N.Srivastava: 'The Gallongs'; Research Department, Adviser's Secretariat, Shillong 1962, p.2.

difficult terrain, the restrictions imposed upon movement through rain-forest, the length of the rainy season and other consideration of physical geography make the Agency a more difficult area to integrate within the state than the North China Plain for Peking or the Ganges plain for Delhi. Also, if it was possible to fly directly from Delhi to the North East Frontier Agency a distance of over a thousand miles would be covered, or from Peking to the Agency over fifteen hundred miles. The land routes are much longer. Factors of physical geography have encouraged independence amongst the various tribes of the North East Frontier Agency, and present trends suggest that it will be a long time before such factors have been negated to the extent that it is possible to say that either India or China has successfully integrated the Agency within their state area, or that the influence of the two countries in the Agency is such as to make the Sino-Indian boundary, which ever version is favoured, a dividing line in the landscape.

III. TRIBAL DISTRIBUTIONS



0 MILES 60

AFTER L.W. SHAKESPEAR 1914

CHAPTER THREE : Physical and Cultural Characteristics of the People

It is somewhat easier to deal with the various tribes of the North East Frontier Agency by using the five administrative divisions of Kameng, Subansiri, Siang, Lohit and Tirap. Map 1 shows the general distribution of the main tribal groups within the five administrative divisions, but it should be emphasised that in most areas along the boundaries with Tibet and Burma the tribes straddle the border. With the present stage of anthropological research in the North East Frontier Agency only a general picture of the delimitation of the tribal areas can be given.

Within the Kameng Frontier Division in the corner of the boundary with Tibet and Bhutan surrounding the great Lamaist centre of Tawang are the Monpas. The Monpas spill over into Tibet and Bhutan and are Lamaist Buddhists. There has been an important lamasery at Tawang for over 350 years. The Monpa culture is a more sophisticated one than most of the other tribes of the North East Frontier Agency. It is based on terrace agriculture and the herding of sheep, horses and yaks. The main centre of the Monpas is Tawang which stand on a plateau amongst the mountains at about 10,000 feet. Their villages are usually at heights from 5,000 to 12,000 feet, and the administrative centre of Kameng at Bomdila is at 9,000 feet. The Monpas live in two storied houses constructed of stone and wood with plank floors

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1. The following books have been of great use in the writing of this chapter: T.K.M.Baruah: 'The Idu Mishmis', Gov. of India, Shillong 1959; P.C.Dutta: 'The Tangsas', Gov. of India, Shillong 1963; V.Elwin: 'A Philosophy for the North East Frontier Agency', Gov. of India, Shillong 1959; C.Furer-Haimendorf: 'Himalayan Barbary', John Murray, London 1959; S.Roy: 'Aspects of Adi Culture' & 'Aspects of Padam Minyong Culture'; both published by the Gov. of India, Shillong, 1964; R.P.Sharma: 'The Sherdukpens', Gov. of India, Shillong 1959; B.K.Shulka: 'The Daflas', Gov. of India, Shillong 1959; L.R.N.Srivastava: 'The Gallongs', Gov. of India, Shillong 1962.

and heavily carved doors and window frames. Due to the cool climate their dress is substantial, with a liking for coloured sashes, highly decorated hats and silver swords. The Monpas are famed for their carpets, but the dominant influence in everything from religion to architecture and textiles is that of Tibet.

Further south is the small Lamaist tribe of the Shurdukpen which migrates for several months each year to the plains to avoid the cold and to trade. To the east of the Monpas are the Akas and Bunguns and to the north extending into Tibet the Mijis who are all influenced by their Lamaist neighbours, but cannot be termed adherents of that faith. The Bunguns are very few in number and have a history of being oppressed by their stronger neighbours. The Akas are familiar to students of Indian history as in the first part of the Nineteenth Century their leader Tagi brought them on numerous raids against the plains to the south. The dress of these tribes is a combination of silk garments traded from India, and Tibetan dress. Their houses are large and slavery is common.

In the eastern part of the Kameng Division are the Daflas (Daphlas) who present a marked contrast to those tribes of the west. Only recently has any sort of administration been imposed upon them. They number about 80,000 and extend far into Subansiri in the east, with a few along the Indo-Tibetan boundary (Indian delimitation). They live in long houses which hold a number of related families, plus their slaves and servants and although there may be many such houses in an area there is rarely a feeling of community spirit. There was at one time wars between the various houses. The culture of the Daflas is a poor one with some work in bark fibre and the best products made in cane. The Daflas are warlike with blood feuds taking their toll of life still.

Living amongst the Daflas are small groups of Sulungs who are probably the aboriginal inhabitants of the area. They are hunters and food gatherers, but they have also acquired ability to work in iron and brass. The Sulung culture is even more primitive than that of the Daflas and they are completely dominated by the latter tribe.

The first known European contact with the Apa Tani tribe (or Apa Tanangs) was the tea planter H.M.Crowe who travelled there at the latter part of 1890. The Apa Tani society was an impressive one based on irrigated fields worked with a hoe. They were completely isolated, but their two crops a year made them prosperous. The Apa Tani area has today been brought effectively under the administration of India (with the exception of the period of the Chinese invasion in 1962). The Apa Tani are energetic, sophisticated in their culture by Dafla standards and have adapted quickly to the modern innovations introduced into their tribal area.

Bordering the Apa Tani tribe is a group of tribes known as the Hill Miris. It was not until 1911 that anything was known of this group and as late as 1953 a party of the Assam Rifles were slaughtered by them. The Hill Miris, and the related Gallongs to the north, lead a harsh existence, 'here you realise what the struggle for existence means. The climate is abominable; the people are under-nourished and tormented by diseases of the skin. There is no art here, little weaving, little of the song and dance that delights tribal society elsewhere; there is simply the long losing battle against hunger and disease.'² The Gallongs do extend into Tibet, but in small numbers. As with all the northern tribes of the North East Frontier Agency in the difficult terrain of the area there is a total ignorance with

2. V.Elwin: 'A Philosophy for the North East Frontier Agency'; Gov. of India, Shillong 1959, pp.15-16.

regard to the boundaries. The Daflas, Hill Miris and Gallongs are similar in culture. They tie their hair in a knot above the forehead, wear a hat which has a peak and decorated with kite or porcupine quills. The Hill Miri women wear a short petticoat held up by a leather belt. Over this is worn a cane skirt fastened tightly over the loins and permitting only short steps. Across the upper part of the body a cane and fibre brassiere is worn. Beads are very popular. The more northerly tribes wear long, dark red wool coats imported from Tibet. The Hill Miris are a less warlike people than the tribes to the north. The Apa Tani are distinguished in their dress by the men wearing a cane belt and the women having wooden nose plugs and large ear rings. The Api Tanis, Hill Miris, Daflas and Gallongs are all animists in their religious beliefs and not even the more northerly members of the tribes have been converted to Tibetan Lamaism. The Hill Miris, Gallongs and Daflas are shifting cultivators with some herding.

From the period of earliest contact the tribes of the Siang Frontier Division have been known collectively as Abors which is a word of plains' contempt meaning 'unruly'. They showed an independent spirit towards outside intrusions and fought vigorously the punitive expeditions launched against them. Of recent years they have proven themselves amongst the most co-operative of the hill peoples and the Indian Government has dropped the detrimental term of 'Abor' and called them Adis. There are a number of tribes which are united by language and culture; these include the Minyongs, Panggis (Pangis), Shimongs and the already mentioned Gallongs with their associated groups which extend into Tibet of the Ramos, Bokars, and Pailibos.

The Abor villages are notable for their dormitory club for men and boys which is of great importance in the tribal organisation and is used by

the tribal council. Some of the tribes have also a club for girls, but the Gallongs and the northern affiliated tribes do not. The Gallongs have a form of polyandry which is unknown elsewhere. Throughout the tribes women are enthusiastic weavers. Dancing is the main recreational occupation. Slavery is common with the three social divisions of freemen, freed slaves and slaves. The Abors are famed orators. Some of the tribes of the north are influenced by Tibet and are Lamaist in their beliefs, whilst those of the south are animist. The northern areas are less prosperous than the more southerly. Again, the economy is mainly one of shifting agriculture and some herding.

Despite the difficult terrain of the Lohit Frontier Division this was the part of the North East Frontier Agency in which the early explorers were most active. In 1827 the surveyor Wilcox visited the area, as did the botanist Griffith in 1836 and Rowlatt in 1845. In 1912 the Dibang Valley was explored and in 1914 the Lohit Valley was followed almost to the Sino-Indian boundary. Of the tribes in the area all the early explorers appear to have had a low opinion, mentioning specifically their filthiness, deceit and small regard for human life. However, these early judgments were perhaps harsh as they are talented weavers and the women are famed for their exotic coiffure. The tribes are known collectively as the Mishmis, but the most important are the Digarus and the Mejus. The tribes appear to have migrated from Burma and have language affinities with the Kachins on the border area with Burma. The most obvious feature of Mishmi life is the fact that, like the Daflas, the village community is unimportant. Again the real social unit is the house, and a rich man's abode may be over a hundred feet long and fifteen feet wide. There is a passage down

one side of the house with rooms leading off from it and up to sixty people may be so accommodated. The more northerly tribes again extend over the border and import wool coats from Tibet which are decorated with crosses and have a multitude of colours. Weaving is done in wool, or cotton or nettle fibre. Finely woven shawls are popular, and the usual dress for women is a long skirt and an embroidered bodice. Both sexes are fond of Tibetan charms and are devoted to tobacco. Amongst some of the Mishmi tribes opium is popular. The Mishmi tribes are mainly animists in religion and rely on shifting cultivation for their livelihood.

To the south of the Mishmis are the Buddhist tribes of the Khamptis and Singphos. The Khamptis immigrated from the Shan States of Burma at the end of the Eighteenth Century A.D. and shortly afterwards came the Singphos who are a branch of the Kachins of Upper Burma. Both tribes were noted for their aggressive characteristics, combining to attack the Sadiya outpost of British administration in 1839. At present the two tribes are peaceful, working as cultivators and traders. The Buddhism of the Khamptis is of a purer sort than that of the Singphos which has been modified by borrowings from animism. Both tribes are famed for their wood carving and their villages are distinctive because of the presence of Buddhist temples. Contact with the plains over many years has made the Khamptis and Singphos more sophisticated than the other hill tribes. The culture of eastern Lohit is basically that of northern Burma, but it has been modified in the more southerly areas by contact with the plains people of Assam.

The Tirap Frontier Division is a narrow strip of difficult mountain terrain which divides Margherita and the Brahmaputra Valley from Burma mainly

along the Paktoi Range. The Noctes tribe has been in closest contact with the plains and is nominally Hindu in religion. The Tangsas wear their hair in a topknot, favour a sarong and have close cultural links with Burma from where they migrated some centuries ago. The Wanchos are perhaps the most energetic of the tribes, having little competition in this claim from the Tangsas who have been notorious for their opium inspired indolence.

The Wanchos and Noctes are divided into three classes ranging from the families of the Great Chiefs, those members of the families of the Great Chiefs who have married commoners, and the commoners themselves. There are separate dormitories for the boys and young men, and also for young women in some villages. The Wanchos wear a minimum of clothing, but a great deal of ornament made from bone, shells and feathers. Both the Wanchos and Noctes were formerly headhunters.

The physical features of the peoples of the North East Frontier Agency are basically of Mongoloid stock and related to the type found in the neighbouring areas of Tibet and Burma. The hair is black and scant on the body and face. Men are of medium height and women short. The presence of the epicanthi fold is common, becoming more pronounced the further north and east one goes. The nose is broad and the figure stocky. Men and women are equally strong as they share the manual work. Thick lips and prognathous faces are rare.

Although physical type is a dangerous criteria for estimating relationships there does appear to be a stronger affinity between Tibet and Burma with the bulk of the population of the North East Frontier Agency than between India and the latter. Culturally many of the tribes have Lamaist connections with Tibet or Buddhist beliefs from Burma and only one tribe has accepted Hinduism. However, most of the tribes adhere to a form of

animism.

With regard to distribution and outlook the tribes in the boundary areas are completely oblivious as to whether they are in India, China or Burma. The boundaries are divides only as far as the physical features of the landscape by which they are delimited are divides in the human geography. Similarly, the wildness of most of the country has dissuaded the bordering states from imposing effective administration up to the boundaries. There is much to support the view that the North East Frontier Agency is a separate entity with regard to its human geography, a separatism which has been greatly assisted by the physical geography.

CHAPTER FOUR : The EconomyAgriculture, Forestry & Fishing

Land ownership in the North East Frontier Agency varies from tribe to tribe, but can usually be divided into that which is owned by the individual, that which is owned by the tribe and used for tribal purposes (e.g. graves) and common land which any member of the tribe is permitted to work. This is modified according to whether shifting cultivation is the technique favoured in agriculture or the more sophisticated types of cultivation like the irrigated rice areas of the Apa Tani plateau. In the Apa Tani lands there is a strong sense of private possession as land is the source of wealth and the less permanent possessions are used to acquire more land. The ownership pattern in the Apa Tani area is as follows; firstly there is the privately owned land which more or less includes all cultivated land such as irrigated rice fields, dry crop fields, garden plots for maize, vegetables, millet and fruit trees, groves of trees and bamboo which are useful, and building sites. Tribal land is pasture near the villages used for grazing and burial purposes, plus forest land which is too far from the villages for exploitation other than for hunting. Finally, common land is usually confined to a small amount of pasture. Land can be bought and sold amongst the Apa Tanis, although it was traditionally bartered for livestock. An outsider can buy other things for money, but not land.

In those areas where the tribes favour shifting cultivation the village boundaries with other villages are most important and are established by

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1. The references used in the last chapter have been of equal usefulness in this, plus the following texts: V.Anstey: 'Economic Development of India'; Longman, London 1952; G.N.Patterson: 'Peking Versus Delhi'; Faber, London 1963; and L.D.Stamp: 'Asia', Methuen, London 1960.

tradition and agreement. All the village dwellers are greatly concerned in preserving these boundaries. Of the villages most were settled in each case by a single clan which cleared the forest and now owns the land. Those who arrived later are tenants of the descendants of the original settlers. Uncleared land is the property of the village which will give permission often to an immigrant to use it and he can transfer his holding to his children if he is granted such land to clear or reclaim. Tenants cannot give their holding to their children in this way as it returns to the owner family should they cease to use it. Therefore each of the descendants of the original clearers have a number of family tracts within the village area. Each year the area for shifting cultivation is selected by the village council and the village priests. 'All the various agricultural operations, in fact, such as clearing the forest, burning the 'jhum' (growth cut down when use of the area is renewed), sowing or dibbling the seed, weeding, fencing and reaping are done by everybody at the same time with the appropriate religious ceremonies.'²

Although nothing is paid to the village by those families wishing to extend their agriculture into the common lands it is an expensive undertaking for not only is there the problem of clearing the forest but many and elaborate sacrifices have to be made to the spirits of forest and hill whose territory they are invading. It should be appreciated that although the most usual form of agriculture in the North East Frontier Agency is a shifting cultivation type unlike other parts of the world where the population also is mobile the tribes here retain a permanent settlement; only their

2. V.Elwin: 'A Philosophy for the North East Frontier Agency'; Gov. of India, Shillong, 1959, p.65.

cultivated plots are abandoned to fallow.

The Jhum Land Regulations of 1947-48 formalised tribal ownership of land in the North East Frontier Agency of India. Outsiders are not permitted to settle in the tribal areas under the Inner Line Regulation of 1873; this stated that a licence was needed for any person other than a member of one of the tribes to enter the tribal areas.

Efforts to improve the agriculture of the tribes have had to take into account the dietary tastes of the areas concerned. The basic diet of cereals, millets, vegetables and meat is more or less the same throughout the tribes. Where wet rice cultivation has been successfully introduced, as in the Apa Tani lands, it has become the staple food, but millet is the more common crop on the shifting cultivator's plots. Also grown is maize, which may be used for a pig food, onions, chillies, sweet potatoes, mustard leaf, and the recently introduced and highly successful common potato. Also cultivated are pumpkins, ginger, mushrooms and the plantain flowers. This diet is supplemented by numerous wild plants such as bamboo shoots. The Abors cultivate sugar cane, but there appears to be a lack of sweet things in the diet, other than the collecting of wild honey, amongst the other tribes.

Milk and butter are popular amongst the Buddhist tribes, but are not favoured by the others. The flesh of deer, squirrels, wild boar, birds and rats is eaten by most tribes, whilst some consider monkey, dog or elephant flesh as a delicacy. The domestic animals such as pigs, cattle, goats and poultry are usually saved for feasting or sacrificial occasions, but again in contrast to the Hindu beliefs further south there is no apprehension about killing cattle. Snakes, frogs and certain insects are eaten and fish is procured when the opportunity avails itself. Both meat

and fish are often dried on racks. In most tribes hunting and fishing has ritualistic significance and the whole village takes part. There are certain 'taboos' which dominate the eating habits of the various tribes, as, for example, the Wanchos' avoidance of one type of fish which they consider a reincarnation of one of their dead forbearers.

Dietary research by the Indian Government has proven that on average the food of the tribesmen is richer than that of the Indian farmers. The tribesmen's diet contained 16% more calories, 17% more protein, 70% more calcium and 33% more Vitamin A. But it has to be remembered that the hill climate is more rigorous and that for several months of the year there is a lack of cereals.

Over 90% of the tribesmen practise shifting cultivation and here the inevitable problem has arisen. All is well if the land is allowed a sufficiently long fallow period in which to recover its fertility, but in many areas an increasing population pressure means that the cycle is being shortened. In numerous places soil erosion is a very real threat to the tribal economy, even although it has been estimated that perhaps only 4% of the North East Frontier Agency is under cultivation at one time today.

The problems of shifting agriculture in the North East Frontier Agency have been viewed carefully by the Indian Government and three methods of solving them have been suggested. Firstly there is the possibility of introducing wet rice cultivation in all areas where it is possible to grow it; this is a limited answer as the areas suitable for this form of agriculture are few. Since 1947 about 20,000 acres of tribal land have been turned over to wet rice cultivation. A second project developed in the more mountainous areas is terracing on the gentler slopes, and this has

been done most successfully by the Monpas. It has not been possible in the parts of the North East Frontier Agency where the tribes do not have the same level of culture as the Monpas to persuade the very conservative cultivators to try terracing. The final possibility was to make shifting cultivation itself a more scientific proposition by limiting its disadvantages. The main proposals so far made have been related to the use of crops to enrich the soil such as nitrogen fixing legumes.

The introduction of wet rice production in particular has produced further problems such as the breaking down of the communal work system with more permanent land holdings, the attraction of wild elephants in such areas as the Lohit Valley to devastate the fields, and the tendency to sell the rice crop which leads to a decline in diet. Terracing also encourages a fragmentation of land holdings. The agricultural practices of the tribes are closely linked with their culture and changing the farming techniques can often lead to a social disruption. What is lacking in the North East Frontier Agency is an educational system which would prepare the tribes to face the problem of change when it comes. Efforts are being made to produce textbooks in the Tibeto-Burman languages of the tribes and to recruit suitable teachers. Of course the Lamaist tribes have a system of education, although it has many limitations. Education in the tribal areas is at a rudimentary first stage of development.

With regard to forest resources there has always been a similar problem throughout the world when dealing with land inhabited by aboriginal tribes. The tribesmen of the North East Frontier Agency consider the hills and forests as their property and any attempts by the Government to alter and improve the forest areas leads to quick resentment on the part of the inhabitants. Often amongst the tribes the forest areas not only have material

importance, but also religious significance to further complicate the picture.

Under these circumstances, with the added problem of India's tenuous control over the Agency, it has been decided to permit the utmost liberality in the administration's approach to the question of forests. Where there are well defined village boundaries efforts are being made to record them on maps to ensure the position of the villagers with regard to the use of forest in their traditional area. Commercial interests in the forest resources are being subordinated to the attitude of the tribesmen.

However, over much of the North East Frontier Agency the population density is so modest that there are large areas of forest belonging to nobody. The Forest Department of the Indian Government has attempted to declare these forests reserves so that the timber may be conserved. So far there are three categories of forest land in the Agency; the Forest Reserves are as yet small in number and limited in area, secondly there are the forests which can be made into Reserves, but such have not yet been established, finally there are the traditional forest areas of the tribes. Tribesmen living near the Forest Reserves have the right to collect timber and other forest products from these areas as long as it is only for their personal use, and not for sale or barter. Similarly, they may fish, hunt and graze cattle freely in these Reserves.

In the lower villages of Siang, the Dibang Valley, Lohit and Tirap where the Indian administration is the most effective the village forest areas have been placed under the control of the village councils, and the revenue from the forests is being used for the development of the villages.

Whether India will be able to extend this arrangement to the less accessible areas of the Agency will depend upon the efficiency of her administrative machine and the settlement of the boundary dispute with the People's Republic of China. Similarly, one wonders whether Indian policy towards the rich forests of the North East Frontier Agency would have been so much in the interests of the tribesmen if the tribal areas were more accessible and Indian control within them more complete. The aboriginal lands elsewhere in India have tended to fare less well than have those of the tribesmen in the North East Frontier Agency once they have been brought fully within the Government's field of action.

'Freedom to hunt and fish is of first importance; the loss of this freedom has been a major cause of tribal decline in other parts of India.'³ Fishing and hunting is of great importance in the supplementing of the diet of the tribesmen, but in many of the more populated areas there is a danger that much of the wild life is being exterminated. Therefore there is a need to protect the wild life in certain areas in order to let it re-establish itself in strength.

The whole of the tribal areas have zones for hunting and fishing which are exclusive to certain villages and clans, for example the Shimongs along the border with Tibet will not permit the Lamaist Khambas to visit the sacred mountain of Riutala; this is not because they feel they are under Indian administration and the Khambas are under Chinese with an international boundary of sorts between them, but because the Shimongs fear the Khambas' pilgrimage would disturb the game of the area.

3. V.Elwin: 'A Philosophy for the North East Frontier Agency'; Gov. of India, Shillong 1959, p.69.

As has been stated before hunting and fishing is also surrounded with religious significance and the bones of a particularly big fish or the antlers of an animal will be hung in the hunter's house and it is a form of sacrilege to desecrate them. The success of a ceremonial hunt or village fishing may be connected in the minds of the tribesmen with the success of the harvest; a good fishing expedition will mean the gods are favourable and a good harvest will follow. Any outside intrusion upon these hunting and fishing rights meets with vigorous tribal opposition. The issue of licences by the Political Officers is therefore kept to a minimum. Those that do hunt or fish are usually advised to hand over at least half of their successes to the people on whose tribal land they have indulged their sport.

In agriculture, forestry and fishing the tribesmen of the North East Frontier Agency are more primitive than, and thus distinct from, the bulk of the population of India or China. Their limited techniques in these economic fields emphasises further that the Agency is in many ways a distinct entity. With the conflict between China and India over the Agency it also appears improbable that, other than for the fringing areas, a change in the character of the Agency is likely to take place in the near future. The tribesmen will not be moulded into the image of their Indian or Chinese neighbours for many years yet.

Mineral Resources and Industry

Knowledge of the mineral resources of the North East Frontier Agency is non-existent, as might be expected in an area which has been under the most tenuous of Indian administrations and which is a zone of vigorous rival claims between the People's Republic of China and India. Any possibility of a com-

prehensive geological survey of the Agency, or even tentative exploration for mineral resources, is now complicated by it being an area between two hostile armies following the Chinese invasion of 1962. It is only possible to judge the sort of minerals within the Agency by the use made of them by the tribesmen.

In 1872 Dalton mentioned that the Khamptis were excellent carvers of ivory, wood and bone and worked in gold, silver and iron.¹ The frequency of local blacksmiths mentioned using iron, gold and silver suggests that these metals are common and found near the surface. Many of the tribes have blacksmiths, but it is a skill confined to certain families. The blacksmiths travel from village to village plying their trade. The Monpas' blacksmiths are located along the Indo-Tibetan boundary (Indian delimitation) and travel throughout the southern areas of the Monpa tribal distribution. The Abors and Daphlas are famed for their brass casting which is made from local supplies of copper and zinc. The Tirap tribes were once well known for their work in silver gained from their territories.

It would be difficult under present circumstances with such a lack of knowledge of local resources and with such an inadequate administrative machine for the Indian Government to promote industry in the North East Frontier Agency other than on the basis of a 'cottage' type. Before the disruption of the Chinese invasion some effort was being made by the Indians to stimulate local crafts.

Painting is only found in the Monpa areas of the Agency where the Lamaist traditions are strongest. There is also some paper making here from local materials, again stimulated by the needs and influences of the

1. V.Elwin (Editor): 'India's Northeast Frontier in the Nineteenth Century'; Oxford University Press, Bombay 1959.p.113.

Lamaist religion. The painting is mainly done on the walls and roofs of the Monpas' religious buildings, but also pottery and wood carving is brightened by paint. The paper is of reasonable quality and used for religious books and the correspondence of Monpa Lamas.

Pottery is rare as the clay of the North East Frontier Agency is unsuited for such use. Bamboo is much more popular for fulfilling the needs of the tribes such as cooking, drawing water or storage. The Apas make clay animals as toys, although there is no knowledge of the potter's wheel. In northern Siang the Lamaist tribes make clay models of Lord Buddha. Clay implements are otherwise imported from the plains of India, although these are few in number.

The Lamaist and Buddhist tribes practise carpentry with a certain amount of skill in the construction of their houses, but such tribes as the Abors use only bamboo. Many of the tribes have a tradition of wood carving which usually has been stimulated by religious beliefs of one sort or another. In Kameng wooden bowls, dishes, cups, religious masks and effigies of Lord Buddha are made, mainly amongst the Lamaist tribes such as the Monpas who are influenced strongly by Tibetan culture. Wooden masks are also popular amongst the tribes of northern Siang who are influenced by Tibet. The Khamptis of Lohit have a fame as wood carvers of figures. The chief centre of wood carving is the Wancho area of Tirap. Toys, pipes, drinking mugs and numerous other objects are carved with a skill unequalled in the rest of the Agency.

To encourage the silver work of the Mishmis or the poker work of the Wanchos the Indian administration had started a number of Cottage

Industries Training and Production Centres. This was aimed at adding new techniques to those the tribesmen already had and to give them subsidiary occupations to make the standard of living a little higher. The crafts were intended to supplement the main one of agriculture. Boys trained as carpenters are able to produce furniture and improve house construction, tribal blacksmiths are improved in their techniques, but both these tradesmen work also in the fields.

The cane work of the tribes of Subansiri, Siang, Lohit and Tirap was originally thought of as a bad investment of India's money in encouraging it as the tribesmen were best known for their cane hats. But later it was appreciated that the traditional skill in cane could be used to produce the much needed furniture for the tribesmen. The tribes of Tirap especially are now well known for their cane chairs.

Efforts to improve the abilities of the blacksmith families have been much slower as there was a need to have ceremonies performed at intervals by the tribal priests to ward off the spiritual dangers challenging the blacksmiths. The first efforts of the Indian Government to influence the blacksmiths have been largely stopped by the Sino-Indian crisis.

Although the attempts of the Cottage Industries Centres in northern Kameng had little success in popularising paper making as a trade before the Chinese invasion progress was encouraging in the art of painting. The Centres had been established at Tawang and Bomdila. At Bomdila pottery had been introduced to the tribesmen with a certain amount of success, making the administration think in terms of trying it in other Centres as well. But the most important of the new crafts has been carpentry. This attracted the most enthusiastic response from the boys of the tribes and the course

was made a two year one.

Soap making has been established in Bomdila, but has failed elsewhere. Bee keeping has also had only limited success for 'to the tribal mind the extraction of honey is an adventure rather than a craft, for the people show courage and enterprise storming the citadels of bees high up the face of cliffs or at the tops of trees'.² Tailoring has also been introduced and is important in those areas where stitched clothing is in demand. In the making of garments an Assamese silk has been very popular, but the plains people have charged the tribesmen exorbitant prices. A Sericulture farm has been established in southern Siang and another in Tirap to teach the tribesmen to produce the silk cloth, and over 200 families have taken up sericulture in these areas.

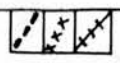
The efforts of the Cottage Industries Training and Production Centres have been hampered by numerous problems. The population is small and agriculture always had to come first in tribal priorities. Boys and girls have been attracted to the Centres by the 35 rupee stipend offered to trainees rather than an urge to gain a skill. Having acquired their trade many of the tribesmen fail to practise it once they have returned to their villages. These problems have led to more careful recruitment, a three to six month probationary period, and at the end of their training the tribesmen are presented with a set of tools. The Centres are made as like the tribal villages as possible so that the tribesmen do not feel at a psychological disadvantage. As much use as possible is made of fellow tribesmen as instructors as this acts as an inspiration to the apprentices to a greater extent than the use of tradesmen from the plains.

2. V.Elwin: 'A Philosophy for the North East Frontier Agency'; Government of India, Shillong 1959, p.105.

A Skilled Workers' Scheme has been set up whereby the better artists and craftsmen are supplied with raw materials and have assistance in marketing their goods, some of which are exported. The greatest influences of such schemes are to be found in those areas where Indian administration has been most effective and least inhibited by the Chinese hostility. In 1955, for example, the first Co-operative Society was established in southern Siang aimed at building roads and houses, and later taking in the trade in consumer goods. These Co-operatives are aimed at stimulating local production by taking advantage of the tradition in many of the tribal areas of the people working together. The Co-operative stores handle the products of the local craftsmen. These Co-operatives have proven successful in the southern tribal areas and efforts were being made to spread further north, but the unstable political position of the Agency has inhibited this.

The tribes of the North East Frontier Agency are in most cases only just beginning to come into any sort of contact with what is generally known as 'modern civilisation'. Local culture and traditions are still the most important factor in the life of the tribesman who feels no obligation in outlook to either India or Tibet but only to his tribe or family. In industry the Agency has nothing which would qualify for the label of 'commercial manufacturing'. Industry is geared to local needs and the policy of the Indian Government has been one of trying to broaden the abilities of existing tradesmen and training the young people in supplementary skills rather than encouraging production for export outside of the North East Frontier Agency. Of the traditional skills it can be said that the more northerly tribes owe much to the influence of Tibet and Lamaism, but that the bulk of the population have developed abilities which are of a unique character in design of products.

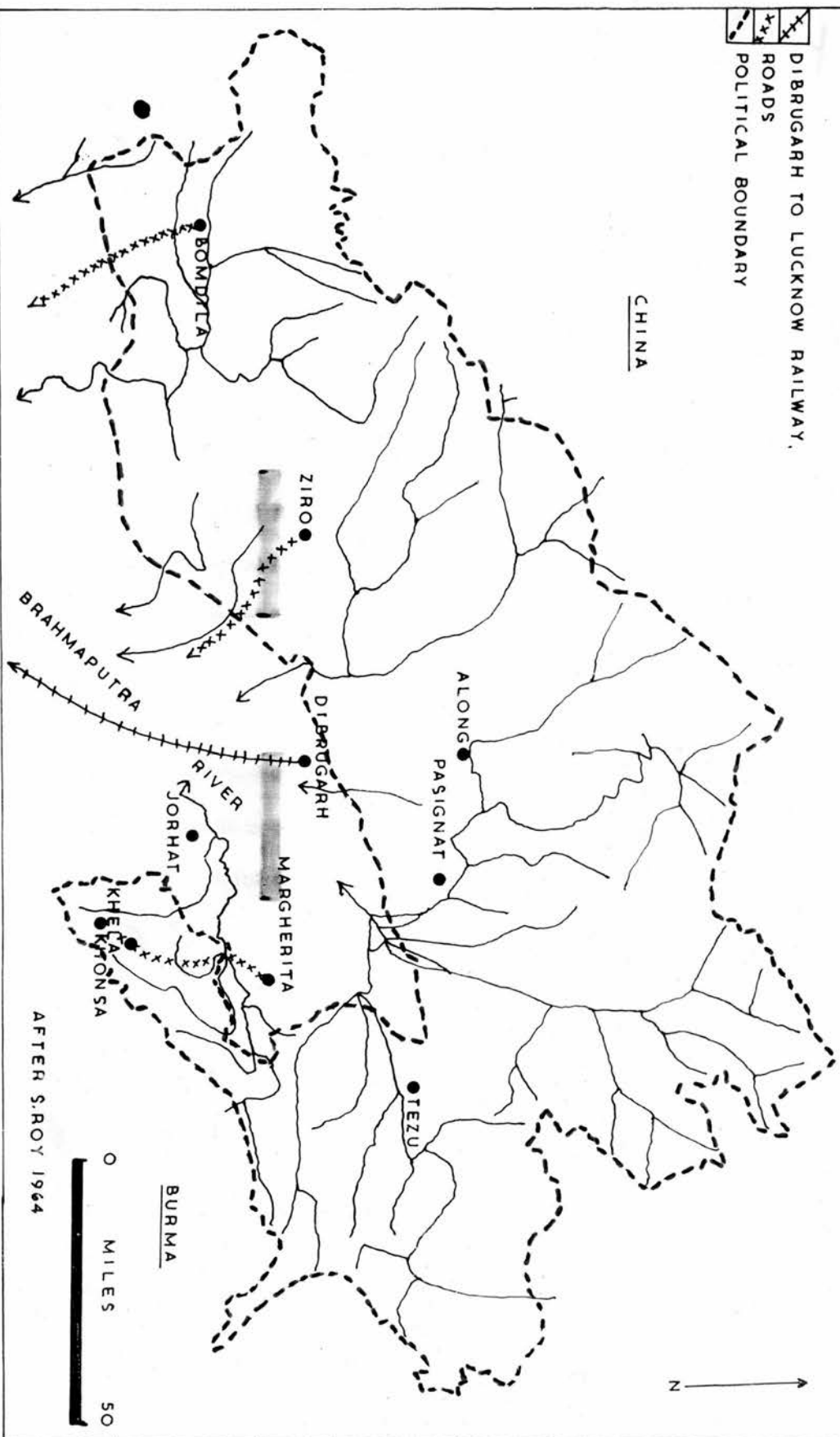
M.P.I. TRANSPORT LINKS.



 DIBRUGARH TO LUCKNOW RAILWAY,

 ROADS

 POLITICAL BOUNDARY



AFTER S. ROY 1964

Transport

The transport network of the North East Frontier Agency is primitive in the extreme. Srivastava's¹ description of Siang gives a good picture of the sort of problems facing any administration with regard to access to the tribal areas; 'The current difficulties in transport and the supply of essential commodities are at present being eased by recourse to airlift ... Rivers, though big, are full of rocks and rapids, and have very strong currents and cross-currents, which render navigation impossible. Small boats and bamboo rafts can and do ply for a little distance in the Siyom, but these are only for crossing from one bank to another. The plying of such boats and bamboo rafts does not help in the way of regular transportation of passengers and goods. It is far from an easy task to make motorable roads in the area due to the formidable nature of the country and lack of such equipment as may be required to construct such roads. And to import everything by plane is a still harder job. Mule tracks are under construction, but these tracks will cover only a limited area - the central portion of the country. Porter tracks, though spread throughout the country, do not yet connect every village with each other and with the outposts and the administrative centres'.

At the time of the Chinese invasion during the autumn of 1962 the transport network of the North East Frontier Agency was as shown on Map 1. On the plains there was a railway line from Dibrugarh to Lucknow, but no connection by rail with the hill areas and none planned. There were seven airfields connecting the administrative centres and more important settlements of the Agency with the rest of India, plus three landing strips only suited

1. L.R.N.Srivastava: 'The Gallongs';
Gov. of India, Shillong, 1962, pp.11-12.

to light aircraft. The Army Engineers had constructed a road from the plains to Bomdila in Kameng which had proven difficult and expensive. Bomdila, which is at 9,000 feet, had gained much from this highway, but it had hardly been completed when the Chinese invasion took place. Using mainly tribal labour Ziro in Subansiri had been connected with the plains, as had Pasighat in Siang (Map 1). In Tirap tribal enterprise had led to the building of a road between Khonsa and Margherita. These roads and airfields represent the total amount of 'modern' transport arteries within the North East Frontier Agency. Since the Chinese invasion it would seem likely that greater efforts are being made by both the Indians and the Chinese in the bordering areas to improve the transport network, but in the 'no man's land' between the Chinese and Indians in the interior of the North East Frontier Agency there can have been no improvement since 1962.

Before 1962 the Indian Government was making some progress in the more accessible areas of the Agency by promoting the construction of new roads and bridges through the tribal councils. The tribal council allotted individual tasks on the village's stretch of road to be built. Where roads had been improved it was not a complete blessing as there followed the money-lender, the exploiting trader and the purveyor of cheap alcohol. The hand-loom industry suffered by the import of cheap textiles, as did a number of other local products. New diseases arrived with the increased exploitation from the plains.

In the Indian Five Year Plans first priority in expenditure upon the North East Frontier Agency was given to transport, with food production next, and thirdly the improvement of health facilities. However, only modest pro-

gress was made in the construction of roads due to the difficulties of the terrain and the limited capital and equipment available to the Indian Government. The Chinese invasion of the North East Frontier Agency in 1962 has emphasised the importance to India of this border, but the core area is now only partly available to the administration. Until the North East Frontier Agency has a comprehensive network of communications with either India or China it will remain a separate entity containing tribes acknowledging only the authority of the tribal council.

CHAPTER FIVE : The Political Geography of the Sino-North East

Frontier Agency Boundary

The advent of Communist power in China and the aggression of the Chinese against India in 1962 has made the North East Frontier Agency of great strategic importance to India. The control of the Brahmaputra Valley, and ultimately that of the Ganges, could be quickly lost by an inability to defend the Agency as the events of 1962 suggested. It is possible for an efficient military force to defend successfully the boundary line favoured by the Indians, but the boundary which the Chinese are claiming is largely indefensible. It is always possible for a determined military force to overcome the physical hindrances of a landscape, unless such advantages of physical geography are used by a determined opposition. A boundary along the foothills would give a defending Indian army no advantage of physical geography, whilst control of the North East Frontier Agency would. Therefore militarily the once unimportant Agency has since 1962 become of outstanding strategic importance.

In answer to the two questions posed in this study neither India nor China's control within the Agency is effective enough to modify geographical distributions. Similarly neither version of the boundary has had the least effect upon the landscape. It is perhaps constructive to deal with some of the reasons why such is the case.

As with Nepal the forces working within the Agency are of a centrifugal type in relation to both India and China. Indian and Chinese administration in the Agency might even be considered less effective than that of Katmandu in Nepal. Not only do tribal loyalties prevail everywhere, but

where an elite has been educated by India they are emulating the Nagas and talking in terms of separate statehood. At least in Nepal when educated the tribesman usually accepts the idea of a Nepalese nationalism. Since 1962 the viability of the North East Frontier Agency with regard to India has been in a state of collapse. Chinese administration within the Agency has rarely existed at all, and when it has it has been limited to the northern areas.

The North East Frontier Agency is typified by the position with regard to language. Most of the tribesmen speak languages belonging to the Tibeto-Burman branch of the Sino-Tibetan family. Including differences of dialect there are over fifty tribal languages. Abor-Daphla is spoken in one form or another from eastern Siang to western Lohit and might later provide the basis for a predominant language throughout the Agency. The Monpas and other northern tribes speak a dialect of Tibetan. The Khamptis and Singphos have connections linguistically with the tribes of Burma and the Thais, whilst the Wanchos and related tribes have a language similar to that of the Nagas. The Indian administrators have found the language barrier between them and the tribesmen immense as not only are the Tibeto-Burman languages difficult to translate or learn to speak, but have led to a different tradition of thought than that of the plains' Indians.

The Indian Union has many dissident minorities within it, but these are located in areas more accessible to Delhi than the North East Frontier Agency. Concessions have had to be made to the Nagas, and it would appear that more yet will have to be made, despite Nagaland being much more effectively within the Indian orbit of administration. Only in the southern areas of the North East Frontier Agency is Indian control other than of a

nominal kind. At present the northern areas are more readily available to Chinese influences, and under the present Sino-Indian stalemate it would seem likely that this situation will continue to prevail.

Considerations of physical geography have emphasised the tribal isolationism of the Agency and made it much more difficult for either India or China to bring effective administration to the area. Topography, vegetation and climate hinder easy movement within the Agency and make the construction of such vehicles of political administration as roads prohibitive in cost. Even if the military situation permitted India to launch upon a programme to provide a comprehensive transport network within the Agency it is questionable if her economy would be equal to the task.

'Few, if any, land frontiers in the world can claim as strong a sanction¹ of long and unbroken tradition'. Although on a basis of past administrative record India may have a better case with regard to the North East Frontier Agency, this claim of the Historical Branch of the Indian Ministry of External Affairs is an absurdity. Within the Agency of over-riding importance is the attitude of the people living there, and almost without exception the allegiance is to the family and tribe. The tribes in the north may have cultural ties with Tibet and those in the south with India, but this does not provide any feeling of Chinese or Indian nationalism amongst these groups. It is as if the British should all be ardent American nationalists because they share the same language and basically the same culture, and to a greater extent than the tribesmen do that of India or Tibet.

To break down the tribalism of the population a programme of development is needed with roads and education high on the list of priorities. The

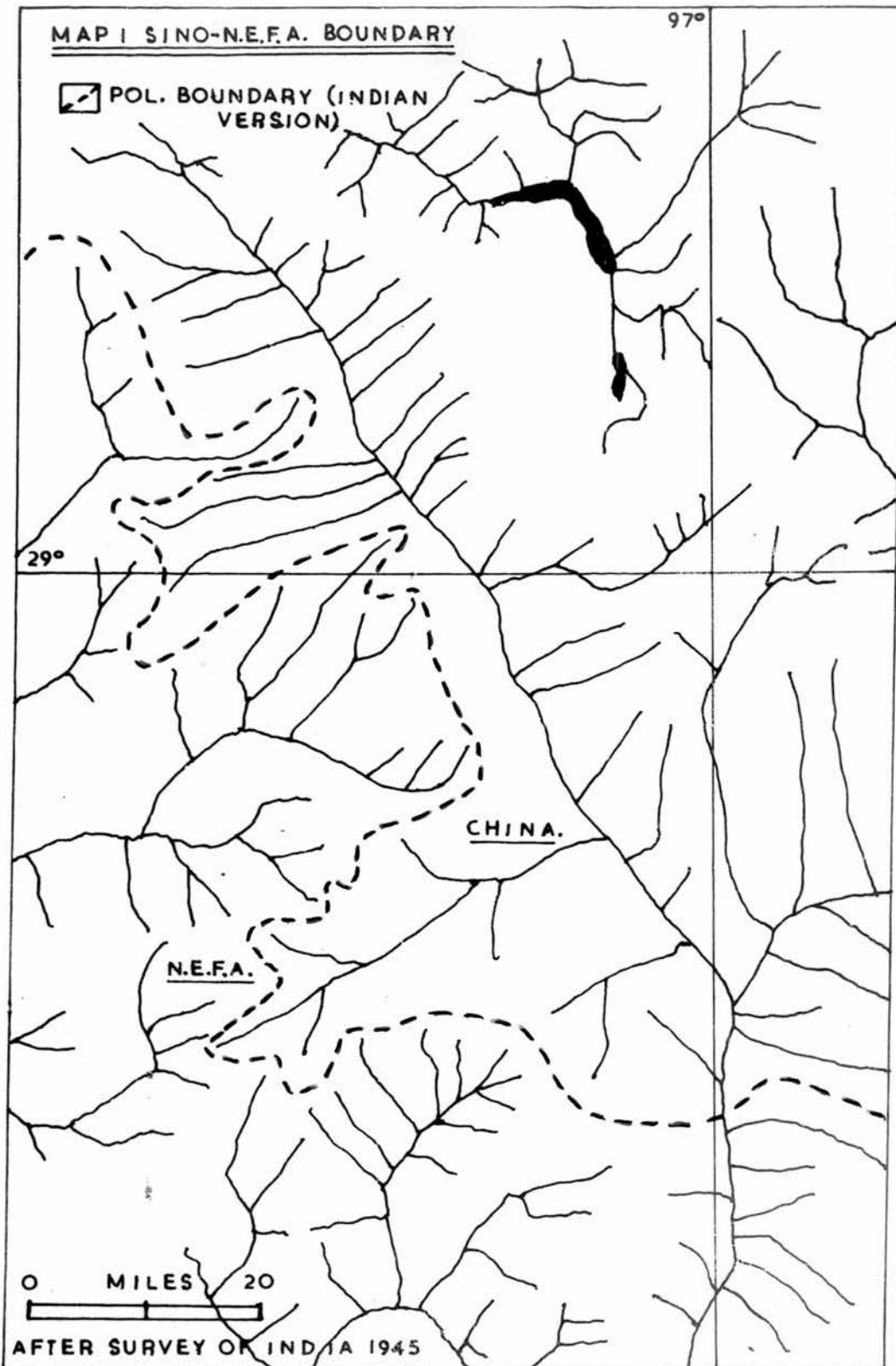
1. Ministry of External Affairs: White Paper No.2; 'Notes, Memoranda, & Letters Exchanged Between the Governments of India and China, September to November 1959'; Gov. of India, New Delhi 1959, p.132.

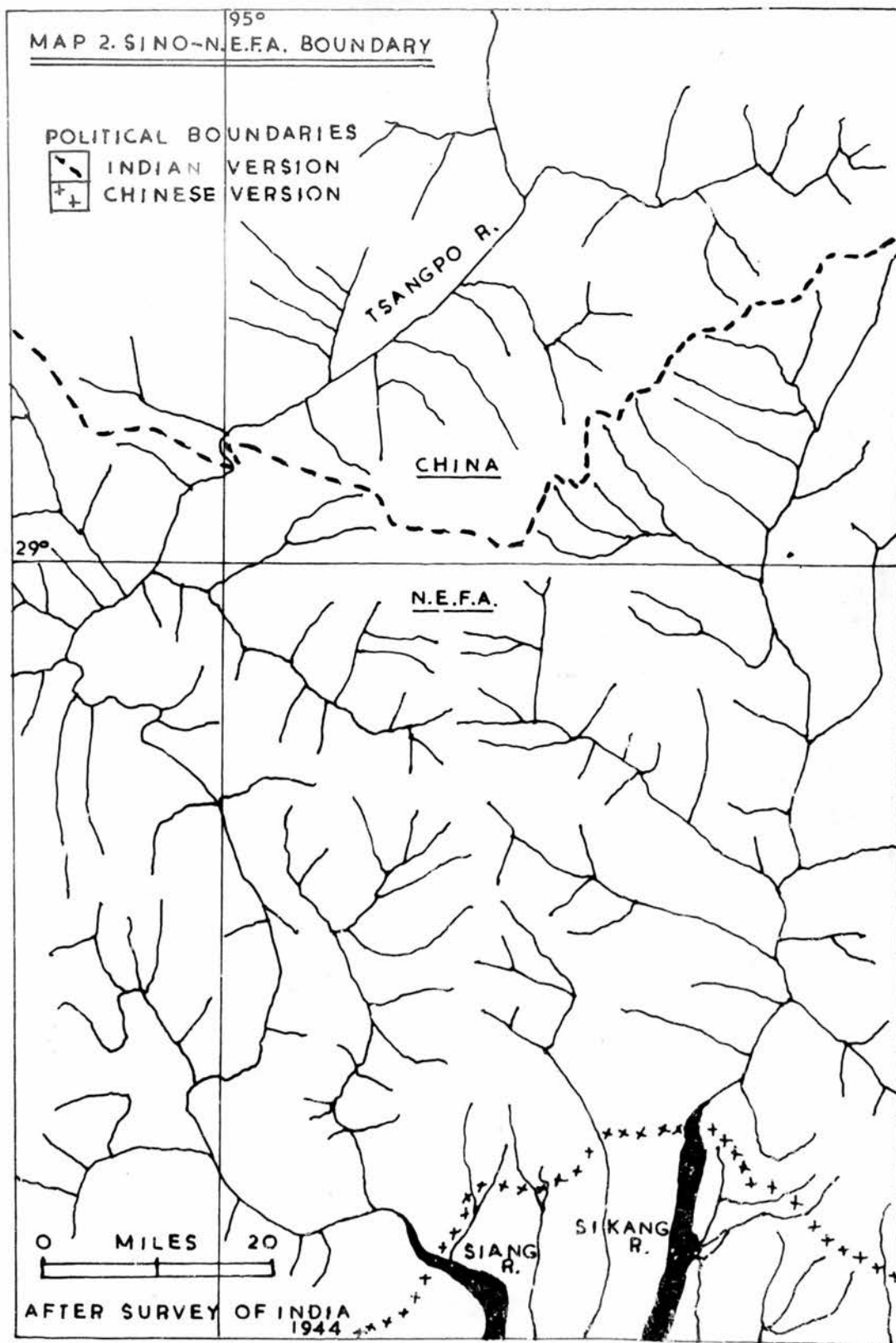
conflict between China and India does not permit the development of such a programme. What would be the outcome of such a programme if it was possible? Easier communication with, say, the south and an increasingly large educated elite would probably produce the opposite effect to that desired by Delhi. So far the tendency has been amongst the educated tribesmen to find most attraction in the possibilities of an independent Agency, or at least a nominally independent state in loose federation with India. India's defeat by China in 1962, and her poorly directed policy in the Himalayan area, has not added to her popularity amongst the peoples of Nepal, Bhutan and the North East Frontier Agency. Nepal has welcomed the building of the Katmandu to Lhasa road to counteract Indian influence in the state, and Bhutan is negotiating for some similar arrangement with China at present. Although to European and American eyes the democratic administration of India is far more attractive than the totalitarian government of China the tribesmen of the Agency may find the greater administrative efficiency of Peking more attractive than the somewhat haphazard Delhi model. The Sino-Indian position along the Himalayan area leaves the North East Frontier Agency with greater independence at present and the small educated elite amongst the tribesmen may prefer an alliance with China than risking even federation with a proven loser such as India. One of the surprising aspects of the present situation in the Agency is that there has been no suggestion of ascertaining the opinions of the population regarding the future, there has been no U.N. Michelmore Report on the feelings of the tribesmen towards inclusion in India, or in China, or possible independence, as was carried out in Sabah and Sarawak before Malayasia came into being.

MAP I SINO-N.E.F.A. BOUNDARY

97°

 POL. BOUNDARY (INDIAN
VERSION)





As the Indian and the Chinese version of the boundary both favour the use of physical features in delimitation they come within Boggs' 'Physical' category or Hartshorne's 'Subsequent'. Under present political circumstances neither line has the least effect upon the landscape as the Chinese are so situated that they may not implement their version of the boundary, and as the Chinese control the northern areas the Indians are in the same position with regard to their version of the boundary. Within their tribal areas the tribesmen enjoy a freedom of movement unhampered by any knowledge of state allegiances or political boundaries. Whether the Sino-Indian boundary follows the watershed delimitation of the Indian version (Maps 1 and 2) or the foothills delimitation of the Chinese line (Map 2) has at present no relevance to the tribesmen.

With regard to the future the North East Frontier Agency is culturally distinctive enough to suggest the possibility of political independence. The sort of arrangement prevailing along most of the rest of the Himalayan area (e.g. Nepal, Sikkim and Bhutan) would be more acceptable to the educated elite appearing amongst the tribes, and would provide a possible solution to the Sino-Indian dispute in the area. Whether such a buffer state would be acceptable to both India and China remains to be seen.

KWANGTUNG PROVINCE

DEEP BAY

MIRS BAY

22°30'

22°20'

22°10'

0 MILES 5

113°50'

114°

AFTER "HONG KONG REPORT"

114°10'

114°20' BOUNDARY

LAND OVER
600'

RAILWAY.

ROADS.

URBAN
AREAS.

BOUNDARY

SHAM CHUN R.

MA TAU
KOK PO

TAI PO

TOLO HARBOUR

MA OH

TIN

MA SHAN

YUEN LONG

MA WANG

NSING O

STONECUTTER'S
ISLAND

KOWLOON

VICTORIA N. POINT

HONG KONG

ABERDEEN

TUNGS
CHUNG

LAN TAU

MUI WO

SHI

SECTION SIX : HONG KONGThe Western Committed Borderland

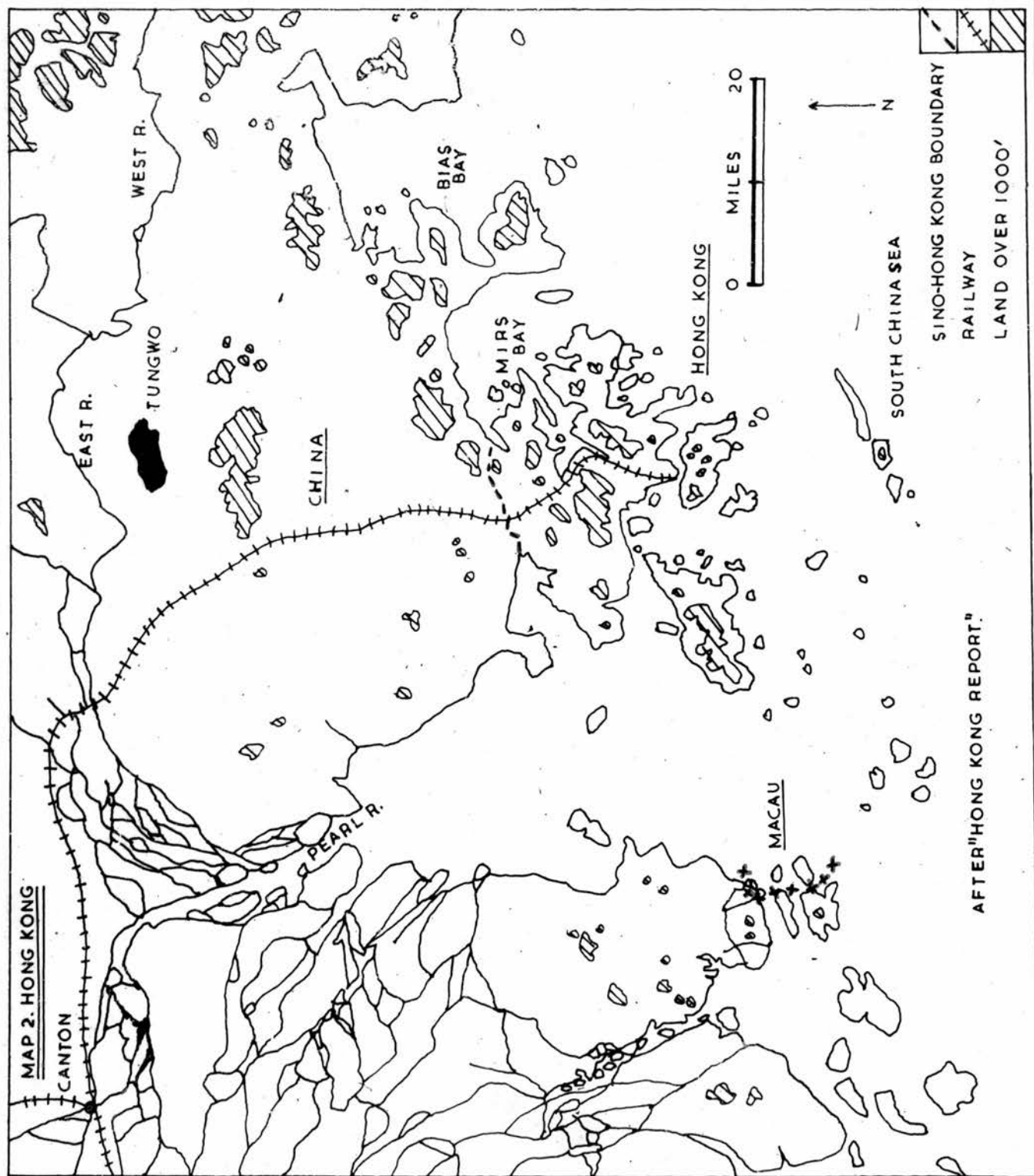
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CHAPTER ONE : Historical DevelopmentPre-Nineteenth Century

The work of archaeologists has shown that Hong Kong was inhabited from earliest times, but was never of any importance as a population centre until the Nineteenth Century A.D. Hamlets supported themselves by fishing, farming and piracy. From the period of the Mongol Yuan Dynasty in China such fishing centres as Aberdeen (Map I), which was then called Shek Pai Wan, were notorious as pirate bases.

Hong Kong is physically a part of the Kwangtung Province of China (Map I) over which Chinese suzerainty was established in the years 221 to 214 B.C., but even the vigorous attempts of the Han Emperor Wu Ti who conquered the area in 111 B.C. failed to convert it from a frontier district. It was not until the T'ang Dynasty (618-907 A.D.) that Chinese penetration of Kwangtung began with any seriousness and only during the Sung period (960-1280 A.D.) did Chinese immigration become numerically significant. 'The oldest villages in the New Territories, those belonging to the Tang Clan, have a continuous history dating back to the eleventh century, and other villages date from the Yuan Dynasty (1280-1368 A.D.). Hakka and Cantonese, the two main Chinese groups, probably settled in the area over the same period'.²

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1. Although other sources have been used of prime importance in this chapter have been the following; G.B.Endacott: 'A History of Hong Kong', Oxford, London 1958; G.B.Endacott & A.Hinton: 'Fragrant Harbour: A Short History of Hong Kong', Oxford, Hong Kong 1962; G.B.Endacott: 'An Eastern Entrepot'; H.M.S.O. London 1964; S.D.Ho: 'A Hundred Years of Hong Kong', U. of Michigan, Ann Arbor, 1952; & I.Ingrams: 'Kong Kong'; H.M.S.O., London 1952.
 2. Hong Kong; Report for the Year 1962, p.333; Hong Kong Gov. Press 1963.



The Sung Emperor Ti Ping, retreating before the Mongols, died at Kowloon in 1278 A.D. (Map 1). His brother, the last Sung Emperor, was defeated in the New Territories and fled south, although many of his followers remained in Lantau (Map 1) where their descendants are still found.

Europe's first maritime contacts with China were through Arab and East Mediterranean traders, many of whom settled in Canton from the eighth century A.D. onwards. The Portuguese were the first European merchants to exploit the possibilities of sending their own ships to China, Jorge Alvarez reaching there in 1513. In 1557 the Portuguese established themselves at Macau, the Chinese administration feeling grateful to them for having helped to suppress piracy in the area. For over two hundred and fifty years Macau remained the most reliable place of contact between China and Europe, despite Chinese hostility to it throughout this period.

In 1637 the Englishman John Weddell endeavoured to force his way through to Canton (Map 2) but was blocked by Portuguese interests and failed. It was not until 1699 that the East India Company ship 'Macclesfield' was able to trade without hindrance with the Chinese. Following this success the East India Company sent ships each year and in 1715 set up a factory outside Canton. Efforts to extend the Company's trade failed and in 1757 European trade in China was limited to Canton by an Imperial Edict and placed under the control of an official of the Emperor called the Moppe. Two years before this Edict a Chinese guild of merchants (Co-hong) was given a monopoly of European trade. Britain's growing control of the Indian subcontinent during the Eighteenth Century led to her having a greater ability than her other European rivals to exploit the possibilities of trade with China and she began to dominate the European contingent in Canton.

At the close of the Eighteenth Century trade with China was lucrative for the European merchants, but limited by the Imperial restrictions. Living in Canton was restricted to the trading season and the Europeans were not allowed to enter the city. In 1793 Lord Macartney was sent as ambassador to Peking to try to gain commercial concessions, but had no success despite being well received. In the main the Europeans were trusted, but were considered barbaric.

Nineteenth Century:

In the latter part of the Eighteenth Century the East India Company's monopoly of British trade with China was beginning to crumble. Licensed private traders used India as a base for commerce with China. This enlarged the British community in Canton and led to the abolition of the East India Company's nominal monopoly by Parliament in 1833. However, this did not overcome the reluctance of the Chinese to extend the commercial privileges of the Europeans. In 1816 a second embassy led by Lord Amherst met with far less success than that of Lord Macartney and was ordered to leave Peking without an audience with the Emperor. In 1834 Lord Napier was sent out to Canton as Chief Superintendent of Trade. His instructions were to be conciliatory towards the Chinese. He lacked power to negotiate with the Chinese or to control the British merchants. Napier failed to obey his orders and went to Canton without the necessary permit and tried to ignore the Cohong in his communications with Imperial officials. Napier's efforts were crude and ineffectual. Napier was a sick man and was forced to retire to Macau where he died shortly afterwards.

Within China opium smoking was increasing rapidly in popularity. The Imperial administration was alarmed by this development. The import of

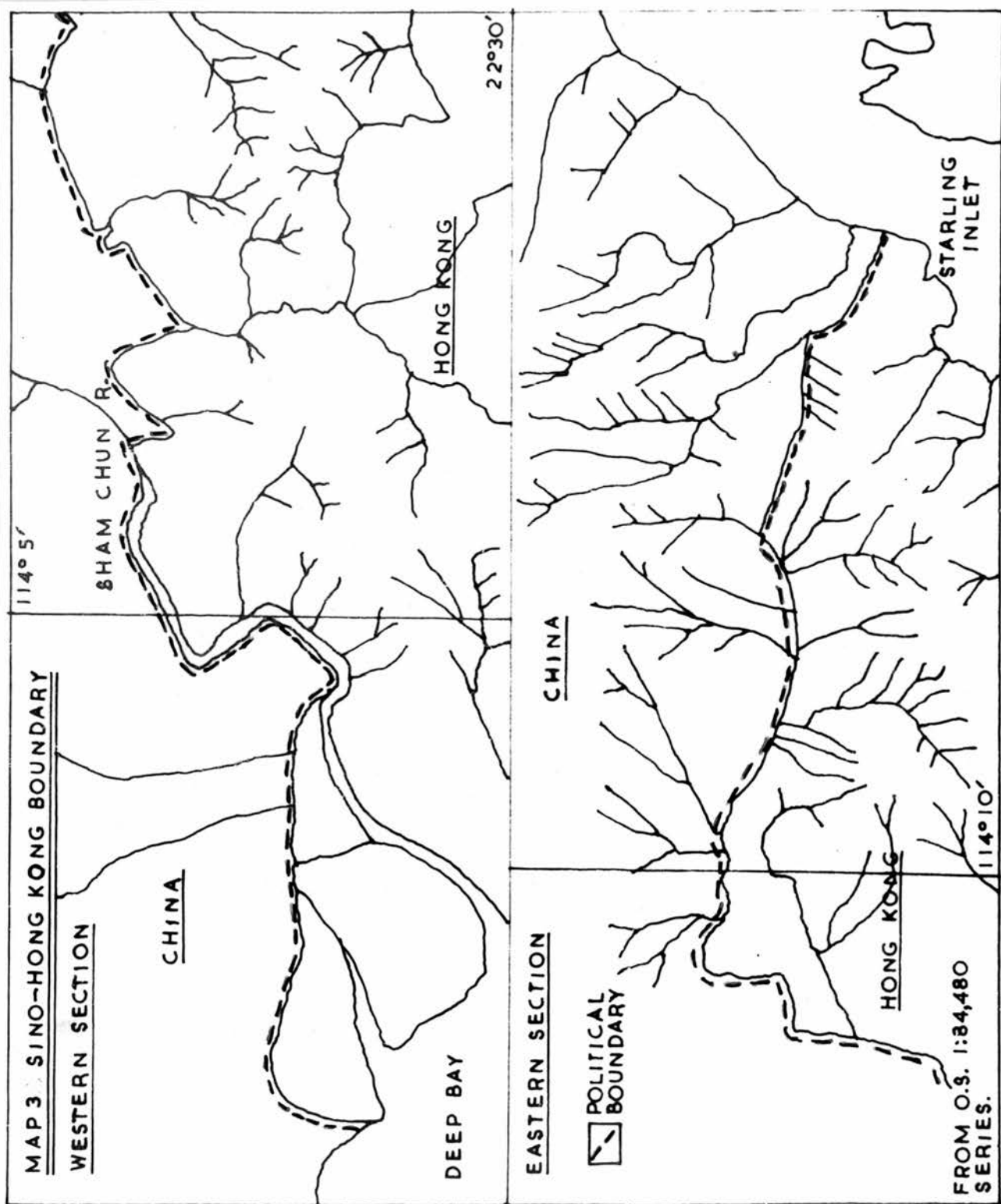
opium was banned by the Chinese, but despite this it was the staple of trade between India and China. Lin Tse-hsu was appointed Special Commissioner by the Emperor with orders to crush the opium trade. In March of 1839 Lin arrived at Canton and surrounded the foreign factories with troops. No Europeans were allowed to leave and they were denied food and water supplies until all opium had been surrendered. Opium traders and ships' captains arriving at Canton had to sign an agreement that they would not import opium with the death penalty for disobeying this import restriction. Captain Charles Eliot, who was appointed Superintendent of Trade in 1836, told all British merchants to surrender their opium, but refused to let them sign the agreement against the import of opium. The British community at Canton was under siege for six weeks, after which they were allowed to leave for Macau. The Portuguese Governor of Macau could not guarantee the safety of the British so Eliot and his countrymen retired to Hong Kong. A number of incidents led to the breaking down of all relations between Lin and Eliot.

The British Foreign Secretary Lord Palmerston decided that Sino-British relations needed settling and demanded a commercial treaty from the Chinese or a small island where the British community could live free from the sort of pressure Lin had exerted. In June of 1840 a British expeditionary force arrived to back up Palmerston's demands. Lin had been replaced by a Manchu commissioner called Keshen who negotiated with Eliot. On January 20th, 1841 agreement was reached over the preliminaries of the Convention of Chuenpi in which Hong Kong was ceded to Britain. The island was occupied by a naval detachment on January 26th, 1841 and shortly afterwards proclaimed a British Colony.

The Convention of Chuenpi was not fully acceptable to either side. It

angered the Chinese and Palmerston referred to Hong Kong as a "barren island with hardly a house upon it" and found it a poor substitute to a commercial treaty. In August of 1841 Eliot's successor arrived at Macau. Sir Henry Pottinger renewed hostilities. The war came to a close in August of 1842 when British troops were poised for an assault on Nanking. Under the Treaty of Nanking Hong Kong was ceded to the British Crown and four other ports opened to trade. In June of 1843, the Treaty having been ratified by both Britain and China, Hong Kong was formally declared a British Colony and the name "Victoria" given to the settlement (Map I). Hong Kong was made a free port and by the Treaty of the Bogue in October of 1843 the Chinese were given free access to it. An early estimate of the Colony's Chinese population gave it as about 4,000 with a further 2,000 afloat. The first official population report in June of 1845 showed a total population of 23,817 (595 Europeans and 362 Indians).

Initially Hong Kong did not prosper as had been hoped due to the attractions of the Treaty Ports such as Shanghai. The 1847 Parliamentary Committee of Enquiry into trade with China recommended economies in the administration of Hong Kong as it was felt that it would never develop as an important commercial centre. However, shortly afterwards there was a vast emigration of Chinese, in 1849 to California and in 1851 to Australia as part of the gold fever which gripped the world, and also to such places as Central and South America as labour for the sugar plantations, or Southeast Asia and the Pacific lands as traders. Hong Kong boomed as a centre for the passenger trade of the coolies. The Taiping revolt which began in 1850 led to unsettled conditions on the mainland of China and to the Colony becoming a refuge area. The population report of 1861 showed the Hong Kong colony as



having 119,321 inhabitants of whom 116,335 were Chinese.

The Tientsin Treaties (Second Anglo-Chinese War of 1856-58) gave Britain and France the right to diplomatic representation in Peking. The first British Envoy Sir Frederick Bruce was stopped at Taku Bar on his way to Peking. Once more hostilities broke out between Britain and China and British troops occupied the Kowloon peninsula. Sir Harry Parkes secured from the Chinese Viceroy in Canton a perpetual lease on the Kowloon peninsula including Stonecutter's Island (Map I). The 1860 Convention of Peking made this lease into an outright cession of territory to Britain. Naval and military claims on Kowloon restricted its development until the Twentieth Century.

The 1898 Convention of Peking was stimulated by mistrust of French and Russian intentions in eastern Asia and followed the 1893 alliance of Britain and China. Britain was given a 99 year lease on the mainland north of Kowloon together with 235 islands in the area. This extension was named the "New Territories". The British take-over in April of 1899 had some opposition but under the enlightened guidance of Sir Henry Blake, who respected Chinese customs, the New Territories were successfully absorbed with the population increasing from 100,000³ to about half a million by 1961 (Census).

At the 1898 Convention of Peking it was decided that the Sino-Hong Kong boundary should be delimited along the Sham Chun River as shown in Map 3. The delimitation is along the river except in the western end where the British had the advantage and a more northerly tributary was used in the area of Deep Bay (Map 3). Since 1899 the boundary has been demarcated along

3. The statistical material is taken from the Hong Kong Annual Reports, plus other Hong Kong Government publications such as the Census.

its total length, a process which has been completed since the advent of Communism in China; today there is fencing along the boundary in an attempt to control illegal immigration into Hong Kong from Kwangtung.

Twentieth Century:

During the Twentieth Century Hong Kong continued to increase in population and trade importance. The Chinese community was given more say in the governing of the Colony with the first Chinese joining the Legislative Council in 1880 and the first Chinese member of the Executive Council taking his seat in 1926. There was equality of race under the law (1865 Governor's Instructions made sure that no ordinance was passed 'whereby persons of African or Asiatic birth may be subjected to any disabilities or restrictions to which persons of European birth or descent are not also subjected').

In the same year as the University of Hong Kong was founded (1911) the Ch'ing Dynasty in China collapsed. During the ensuing period of troubles on the mainland further refugees immigrated into Hong Kong. Chinese participation in the First World War led to a wave of anti-foreign feeling with a boycott of foreign goods. This Chinese nationalism stimulated a seamen's strike in Hong Kong in 1922 and a General Strike in 1925 and 1926. Although Britain bore the brunt of the Chinese feeling against foreigners immediately following the First World War Japan soon replaced her. The Chinese remembered with bitterness Japan's Twenty One Demands of 1915. In 1931 Japan occupied Manchuria and her machinations in China's northern provinces led to open war in 1937. In 1938 Canton was taken by the Japanese forces. In 1937 100,000 refugees entered Hong Kong, about half a million in 1938 with the fall of Canton, and another 150,000 in 1939. By 1939 Hong Kong's population was therefore about 1,600,000.

The outbreak of war in Europe in September 1939 helped Japanese ambitions in Asia. On December 8th, 1941 Japan attacked from the mainland of China, forcing the British to retreat from the New Territories and Kowloon to Hong Kong Island. The Japanese forces attacked Hong Kong Island on the night of December 18th - 19th, and the Colony surrendered on Christmas Day. The Japanese occupation was to last three years and seven months and left Hong Kong in a sorry state economically. Civilian government under the British was restored on the 1st of May 1946. Sir Mark Young resumed his Governorship and the population rose from about 600,000 at the time of the Japanese defeat to 1,800,000 by the beginning of 1948.

The defeat of the Chinese Nationalists on the mainland during 1948-49 led to the greatest immigration in Hong Kong's history. Over 700,000 refugees entered the Colony during 1949 and the first months of 1950. They were mainly from the province of Kwangtung, but also from Shanghai and other industrial and commercial centres. By December of 1950 the population of Hong Kong was over 2,350,000.

Since 1949 Hong Kong has survived under the shadow of the aggressive reputation of the People's Republic of China. The Colony has, however, prospered as China's outlet to much of the rest of the world and the People's Republic is Hong Kong's principal supplier of imports (18% of the Colony's total in 1963). China is also the third largest market for Hong Kong's re-exports, although she does not figure prominently in the Colony's domestic exports. Immigration from China continues with frightening vigour, for example on May 23rd 1962 5,620 immigrants were arrested trying to cross the Sino-Hong Kong boundary of whom 5,112 were returned to China, and yet despite this careful check upon the border it was estimated that 60,000 managed to

immigrate illegally into Hong Kong during May. With this immigration, plus a high birth rate of 32.8 per mille (death rate of 5.9 per mille), it was hardly surprising that the total population of the Colony in the 1961 Census was found to have reached 3,129,648. Since the 1949 Communist victory in China both Chinese and British officials have been endeavouring to impose the boundary upon the landscape in such matters as population movement, but often only with limited success.

CHAPTER TWO : Physical Characteristics of the Land

Hong Kong is located on the southeast coast of China adjoining the Kwangtung Province of the People's Republic. It is within the tropics, being about 100 miles south of the Tropic of Cancer. It lies between latitudes 22 degrees 9 minutes and 22 degrees and 37 minutes, and longitudes 113 degrees and 52 minutes and 114 degrees and 30 minutes East. Kowloon is about 90 miles southeast of Canton and 40 miles east of Macau (Map 2). This diminutive Colony has a total land area of a little over 398 square miles of which Hong Kong Island (Map I) and the small islets account for 29 square miles, Kowloon and Stonecutter's Island just under 4 square miles and the New Territories 365½ square miles.

As with much of the rest of southeast China Hong Kong is covered by a series of granitic domes. Associated with these intrusions are minerals of economic value such as galena, magnetite, silver, gold, graphite, feldspar and quartz. The structure of the Hong Kong area is a sloping monocline which strikes parallel to the Chinese coast (i.e. northeast to southwest). The axis of the monocline runs through the centre of Hong Kong. The appearance of the landscape, which is one of rugged islands with deeply dissected peninsulas, signifies an upland terrain which has been invaded by the sea. Weathering is chiefly through chemical action helped by the alternation of dry and wet seasons. This results in a laterised rock mantle with depths of more than 100 feet in some places.

The more prominent hills are made up of either volcanics or porphyries and form a contrast to the lower granite hills. The plains are recent

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1. The following have been of importance in this chapter: S.G.Davis: 'The Geology of Hong Kong'; Government of Hong Kong; S.G.Davis: 'Hong Kong in Its Geographical Setting'; Collins, London 1949. I.Ingrams: 'Hong Kong'; His Majesty's Stationary Office, London 1952. J.E.Peacock: 'Hong Kong Meteorological Records & Climatological Notes; Government of Hong Kong 1952.

depositions of alluvium. Erosion benches are common up to 400 feet and above suggesting the fluctuation of the whole area during geologically recent times and harbour borings have brought to light weathered rock surfaces overlain by peat. The highest peaks are at about 3,000 feet and are made of fine grained crystalline rocks. The coarse grained granitic hills range in height from 800 to 1,200 feet and are of the Upper Jurassic period.

Only the Yuen Long area near Deep Bay (Map I) has a soil of any depth. Everywhere else in the Colony the soil is thin, often averaging only two inches. The residual soils are acidic and infertile and need potash, lime and superphosphates to make them productive. Another problem is that the crystalline nature of the rock formations does not favour aquifers so there is little underground storage of water and most water for agriculture must be from surface sources. The rainfall is erratic leading to shortages such as in 1938 when the rainfall was only 55 inches, or 30 inches less than the normal average. To partly overcome this problem Hong Kong is constructing a network of reservoirs.

Monsoons dominate the climate of Hong Kong which gives a variety somewhat unusual in the tropics. The winter monsoon is from the northeast and commences in September and lasts usually until the middle of March, although it has been known to continue into May. Early winter is the pleasantest period of the year with warm and dry days and a temperature of between 70 and 75 degrees F. At the beginning of January rainfall is slight, but the sky is overcast and a chill wind often blows. In early spring there are usually periods when the cool northeasterlies are replaced by warm southeasterly winds leading to coastal fog.

In summer the monsoon blows mainly from the southwest and occurs from about mid-April to September. It is less persistent than the winter monsoon. Summer is the rainy season and the weather is hot and humid with cloud cover, showers and occasional thunderstorms. According to the readings of the Royal Observatory (established in 1883) the annual rainfall has varied from 46 inches to 120 inches, but averages 85 inches. On average the five dry months from November to March have only 9 inches of rain, whilst the rest of the year has 76 inches. The rainfall varies also over the Colony according to relief with the higher areas having a greater fall and the smaller islands having about half the rainfall of the mountain regions.

The daily temperature mean ranges from 58 degrees F in February to over 82 degrees F in July. The yearly average is 72 degrees F. February is the coldest month with a mean minimum of 55.6 degrees F, but usually the temperature will at this time go below 45 degrees, F. Afternoon temperatures are usually about 9 degrees F higher than the coldest temperature at night. The mean relative humidity exceeds 80% from roughly the middle of February until the first week in September. November on average is the least humid month with 69% relative humidity, although the lowest recorded reading of 10% was for January.

From May to November tropical cyclones cause gales, the most likely months for their occurrence being July, August and September. The passage of these cyclones bring strong winds and torrential rains. There is an average of one gale a year and less frequently the centre of a mature typhoon will bombard Hong Kong with winds of hurricane force, for example in September of 1962 the typhoon 'Wanda' led to 138 dead, 34 missing and 130 persons injured, plus 72,000 people registering themselves homeless with the Social Welfare Department.

With regard to vegetation Hong Kong is within the frost-free double ² cropping rice zone of southern China. As might be expected all available land is used for agricultural purposes. Rice is the main crop of the New Territories, but it is surpassed in importance by market gardening. Where water permits there are two rice crops a year, the first being sown in the nurseries in March, transplanted in April and harvested in June; the second crop is placed in the nurseries in June, transplanted at the end of July and harvested in early November. Market gardening, including flowers for the urban areas, increases each year in importance. Vegetables are grown throughout the year, but have their greatest significance in the coolest months. Some areas manage eight crops of vegetables each year. The upland areas suffer from highly leached and acidic soils and are therefore mainly grass covered and it is here that since 1945 an intensive programme of afforestation has taken place.

Physically the Colony of Hong Kong is part of China. However, the fact that Hong Kong is under a different political administration is having a modifying effect on certain aspects of the Colony's physical geography. Since British administration there has grown up a vast industrial and commercial city which has had a certain superficial impact on the terrain. More dramatic have been the changes in vegetation with the ever growing importance of market gardening to supply the urban areas, and the governmental programme of afforestation. The development of mineral resources also produces a somewhat different landscape. Hong Kong under the British administration is developing economically much more quickly than is the bordering Chinese

2. T.R.Tregear: 'Land Utilisation in Hong Kong, with Maps of Hong Kong and the New Territories'; University of Hong Kong Press 1955.

province of Kwangtung, even allowing for the city of Canton. This is producing a certain amount of physical contrast each side of the Sino-Hong Kong boundary, although it should be stressed that the effect of political factors is always much less regarding the physical geography of an area than it is upon aspects of the human geography. The impact of the Sino-Hong Kong boundary today upon the Canton to Hong Kong railway is easy to appreciate, whilst its effect upon the climate of Hong Kong is non-existent.

CHAPTER THREE : Cultural Characteristics

At the end of 1962 the population of Hong Kong was estimated to number 3,526,500. Using language and place of origin as a criteria 98% of this total were Chinese. At the last Census of January and February 1961 the population had been given as 3,129,648 of which 1,607,779 were male and 1,521,869 were female. The previous official Census had been taken in 1931 when the population had been found to number 849,751. The Department of Statistics estimate of population in September of 1949 put the total at approximately 1,857,000. Estimates of population are difficult 'since the number passing both ways across the frontier in any one year can be equal to or greater than the total of the population'.¹ Illegal immigration in particular complicates the population increase estimates, but of the estimated increase in 1962 of about 300,100 91,581 was the outcome of the excess of registered births over registered deaths and 208,500 the net balance of migration.

In the 1961 Census 33,140 came from British Commonwealth countries outside Hong Kong, of which 27,936 lived in the urban area. Those from non-Commonwealth countries (except China) numbered 16,607, of which 13,467 lived in the urban area (Map I). The Aliens' Registration Office for non-Chinese alien residents (excluding children under 16 years old) at the end of 1962 gave the following figures; total registered 8,159 of which American citizens provided the largest group with 2,103, followed by Portuguese (1,863), Japanese (652), Filipino (422), Dutch (386), Indonesian (329), French (323), Italian (302) and German (300).

1. Hong Kong: The Report for 1962; Hong Kong Government Press 1963, p.36.

Of the urban population of Kowloon and Hong Kong about half is of Hong Kong birth, the vast majority having descended from immigrants from Kwangtung Province in China. The Kwangtung districts which have supplied the largest elements of Hong Kong's urban population are those bordering the Colony, notably Po On, Tung Kwan, Wai Yeung, Mui Yuen, Chiuchow, Sze Yap, Nam Hoi, Pun Yue, Shun Tak and Chung Shan. Also in the urban community is found a Fukien group and Overseas Chinese whose families originated in either the Kwangtung or Fukien Provinces. (As Map 2 in Chapter Three of Section Two demonstrates the two Provinces have both a coastal position and a proximity to Hong Kong which make them logical emigration areas for the Colony).

806 out of every 1,000 inhabitants of the urban area of Hong Kong, Kowloon and New Kowloon have Cantonese as their mother tongue. As the name implies it is the dialect of Canton, plus others which resemble it. Another 137 in every 1,000 inhabitants of the urban area speak other dialects of Kwangtung, Hoklo being the most important, followed by Sze Yap and then Hakka. 28 speak Shanghai, 13 English, 10 the Kuoyu dialect and 6 some other tongue. Of the families coming from North China there is a tendency to adopt Cantonese. English is increasing in use, but Kuoyu is dying out except in the intellectual circles. Amongst the speakers of minority languages or dialects there are one or two concentrations within the area of the Colony, notably Chiuchow in the western district of Hong Kong Island, Fukien and Shanghai speakers at North Point (Map I) and Sze Yap speakers at Wan Chai. In Kowloon there is a Chiuchow concentration at Wong Tai Sin, Sze Yap speakers in Mong Kok and Cheung Sha Wan and the Shanghai dialect is concentrated in Hung Hom. The most notable grouping of Kuoyu speakers is in the district of the University of Hong Kong.

Within the New Territories there are four main dialect groups, the traditional land dwelling Cantonese and Hakka, and the boat dwelling Tanka and Hoklo. These groups show differences in physical appearance and customs. The Tanka and Hoklo are thought to be of non-Chinese origin, although they consider themselves Chinese. The usual village consists of just one clan, although multiclave settlements do occur. Custom demands that the men marry outside of their respective clan. There is no record of marriages between land and sea dwellers.

The Cantonese are found occupying the best areas of the two main plains of the northwestern part of the New Territories and own a great deal of the more fertile land in the other parts. The Cantonese are also the majority group in the principal islands. Their oldest villages are those of the Tang clan in the Yuen Long district (Map I) and have been settled since the late Eleventh Century A.D. A similar age has been proven for the Cantonese villages at Shek Pik and Mui Wo on Lantau Island (Map I). On the same Island some of the Cantonese villages in the Tung Chung Valley date back to the Thirteenth Century A.D.

The Cantonese and the Hakka entered the Hong Kong area at about the same time, but the former met with greater success. The Hakka are today found upstream of the Cantonese in the New Territories on the poorer soils. They were historically subservient to the powerful Cantonese, but recent immigration has restored the balance. The Hakka now dominate in such areas as the Sha Tau Kok Peninsula near the eastern end of the Sino-Hong Kong boundary, on the islands of Tsing Yi and Ma Wan and in the foothills of Tai Mo Shan (Map I). The former hostilities between the Cantonese and Hakka are breaking down and intermarriage is now common with some villages shared between the two dialect groups.

The Tanka are the main seafarers of South China and make up most of the boat dwellers of the Colony. They own substantial sea-going junks and engage in deep sea fishing. In the main the family lives afloat, although some live ashore. The Tanka have been in the Hong Kong area since time immemorial, as have the Hoklo. The Hoklo are less numerous than the Tanka and are mainly found in the eastern waters of the Hong Kong area. The Hoklo have in some cases settled ashore for a number of generations.

Since the Chinese Revolution of 1911-12 the immigration influx into the New Territories has been such that the indigenous population has tended to be swamped. Most of the immigrants have been Cantonese, Hakka, Tanka or Hoklo and have either been integrated into the Colony or are in the process of being absorbed. It is the more northerly Chinese newcomers who are assimilated less quickly, although the only group which has completely resisted integration is a community of miners from North China found at the base of Ma On Shan (Map I).

As a result of the expansion of industry, commerce and public utilities into the New Territories from the urban areas there has also been an emigration from the overcrowded city zones into the New Territories. This trend is beginning to show itself in the 1961 Census figures for language groups in the New Territories where 664 out of every 1,000 inhabitants gave Cantonese as their dialect (but this included Tanka and Sze Yap speakers), 234 Hakka, 46 Hoklo, 26 Shanghai, 13 English, 9 Kuxyu and 9 all other languages. According to the 1961 Census the total population of the New Territories was 456,404 of which 46,459 were boat people.

It would be difficult to produce an accurate language map of the Colony because of the comparative mobility of the population due to such

factors as immigration from the People's Republic of China and the booming industry and commerce of Hong Kong. There are, however, strong cultural ties for 98% of the population with China and yet the boundary has already begun to represent a notable division in the geography of the region. Since the advent of the Communist Revolution in China in 1949 that state has been vigorously endeavouring to change the ways of the population with a success unparalleled in its history. The Chinese culture to which the inhabitants of Hong Kong adhere is already largely a remnant of a former period within China, to take but one example the cult of ancestor worship which still prevails in most Hong Kong communities is officially no more within China. Similarly those who have immigrated into Hong Kong since 1949 are largely people who are unwilling to accept the changes which the Peking Government has imposed.

And yet the Chinese culture within Hong Kong is changing as rapidly, if less painfully, as that in China. The divergence between the Chinese of Hong Kong and those of China is well illustrated by religion. Within the People's Republic of China, as befits a Communist country, religion is actively discouraged. Hong Kong presents a quite different picture. There is, for instance, a Christian community of about 400,000 people which is growing at the rate of 12% per annum in the New Territories and Kowloon and 7% in Hong Kong Island. 96% of the total Protestant strength in the Colony is Chinese (mainly Anglican, Lutheran, Baptist and Methodist). The Roman Catholic Church claims a community of 190,000 and run 174 schools with 111,748 pupils in them. Christianity within Hong Kong is vigorous and impossible for the Chinese population to ignore. A Chinese educated in a Roman Catholic school will have an attitude which is quite distinct from the

product of the Chinese Communist way of life in Kwangtung.

Buddhism in Hong Kong is undergoing a revival amongst the Chinese population, largely stimulated by the immigration of Buddhists from the mainland. There are numerous monasteries and nunneries easily accessible to the population. Taoism also has many adherents, although it takes a second place to Buddhism. The clan system has survived in the New Territories and many of the villages have an ancestral hall in which to keep the ancestral tablets for veneration; it should be stated however, that the clan system is breaking down everywhere in the Colony.

If present trends continue in the Colony on one side of the Sino-Hong Kong boundary in future decades will be found a largely Christian Chinese population speaking Cantonese within an Anglo-American city environment, and on the other side will be found a Communist regime without religion other than the concept of the advancement of the state, with greater uniformity in dress and consumer goods but more variety in dialect and language. From the viewpoint of human geography the Sino-Hong Kong boundary is of prime significance.

CHAPTER FOUR : The Economy1Agriculture & Forestry

Another way in which the political boundary has been accentuated is in the form of land holding on either side of it. China's recent agricultural experiments in collectivisation and Communes have been much publicised and contrast with land tenure in Hong Kong. Following the acquisition of the New Territories the Colony established a land court to hear the inhabitants' land tenure claims. Holdings so established were confirmed by the Government and are known today as Old Schedule Lots. The work of the land court came to an end in 1905 and land other than the Old Schedule Lots was claimed as Crown property, the leases of which could be sold at public auction as in Kowloon and Hong Kong. New Territories' leases bought from the Crown are called New Grant Lots. However, the Government has always acknowledged the rights of villages to land surrounding them where they may pasture their cattle or bury their dead and so no Crown land is auctioned before the villagers have had a chance to object; no reasonable objection is ever ignored.

Much of the land of the New Territories is owned by clans which have claims of many centuries to it. Traditionally a part of the money coming in from renting such land is put in a fund for clan welfare, education or the upkeep of religious buildings. Clan lands may not be sold without the agreement of the clan members and the permission of the District Officer. Most of the Crown rents are paid in cash (rents are in kind elsewhere) at a rate fixed when the land was leased so that in many older examples it is

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1. Much of the material on Agriculture is from W.J.Blackie: 'Agriculture & Animal Husbandry Ventures'; Cathay Press, Hong Kong 1954, & W.J. Blackie: 'Report on Agriculture in Hong Kong'; Director of Agriculture, Fisheries & Forestry, Hong Kong 1955.

very cheap by present day standards. On clan or privately owned lands the rent of a piece of land in a two crop rice area per year will be about 40% of the annual crop total. Holdings are small and average under 2 acres with 5 acres being most exceptional.

In the Colony as a whole for 1964 the following break-down of land use was made; there was about $22\frac{1}{2}$ square miles of urban development ($5\frac{1}{2}\%$ of the total land area) which included roads and railways, 111 square miles of steep and largely unusable land (28%), $22\frac{1}{2}$ square miles of woodland (a little over $5\frac{1}{2}\%$ of the total area), 162 square miles of grass and scrub (somewhat more than $40\frac{1}{2}\%$), 20 square miles of eroded land (5%), mainly granite, $5\frac{1}{2}$ square miles of swamp and mangrove ($1\frac{1}{2}\%$) much of which is suitable for reclamation, 2 square miles of fish ponds ($\frac{1}{2}\%$) which are used for fish farming, and $52\frac{1}{2}$ square miles of arable land (Just over 13% over the total land area) which includes orchards and market gardens.

Relief tends to dominate what uses may be made of land. From the point of view of the farmer all the readily cultivable land is being used and the possibilities that remain are marginal. Over 80% of the Colony could be termed 'agriculturally marginal land', but the expanding urban areas tend to encroach on the arable areas rather than the marginal land. Where possible land for new industry is reclaimed from the sea but this only partly stops the move into the arable lands. Agriculture is having to become more intensive and to try and develop the marginal lands.

Similarly in 1937 there was a forest cover of 22 square miles, plus 81 square miles of private forest lots, but during the Japanese occupation much of the timber was used. The postwar afforestation programme

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2. Much of the material on forestry is from A.F. Robertson: 'A Review of Forestry in Hong Kong with Policy Recommendations'; Government of Hong Kong 1951.

has been brought into being to improve the water catchments, counteract soil erosion and use lands not suited to other productive forms of use, 'the establishment of pure forests tends to be restricted to areas incapable of more intensive development.'³

To stimulate the production of food in the Colony the Government has three Departments. The Agriculture and Forestry Department is interested in the best form of land utilization and gives advice and technical help to farmers, the Co-operative Development and Fisheries Department, plus the New Territories Administration, are concerned with the fishermen in territorial waters and the administration and organisation of every kind of co-operative grouping. Loans are available through the Kadoorie Agricultural Aid Fund which was started in 1955 by the Government and the Kadoorie brothers.

The nature of agriculture in Hong Kong is changing. Since 1954 the area under two crop padi has fallen from 20,191 acres to 16,545 acres, the land now being used for mainly vegetable production. A further 2,709 acres of land is in one crop padi and 127 acres in upland rice. Rice production is usually about 16,000 metric tons (1962 : 16,463 tons) worth approximately £1,030,000 to the economy of Hong Kong. An average yield of padi from an acre of two crop land is 1.2 metric tons, but the introduction of better seed varieties, irrigation and the use of fertilisers produces 1.8 metric tons on average land or over 2 metric tons per acre on the better land.

Land under permanent vegetable farming rose from 2,254 acres in 1954 to 6,484 acres in 1962 and was due to the conversion of 3,700 acres formerly used for rice and the development of 530 acres of marginal land. In

3. Hong Kong: Report for the Year 1962; Gov. of Hong Kong 1963., p.101.

addition 1,200 acres of two crop padi is used for winter vegetables. The main crops of vegetables are white and flowering cabbage, Chinese lettuce and kale, turnip, mustard, spinach, beans, cucumber, watercress, cauliflower and tomatoes. Nightsoil is still very popular, as are other organic manures, but there is an increasing use of artificial fertilisers. Full use is made of insecticides.

Sweet potatoes are important both for human consumption and feeding pigs. There are 2,500 acres of sweet potatoes double cropped on the drier lands, and 3,360 acres as a crop following the second padi harvest. Sweet potatoes yield an average of 4.3 tons per acre per crop. There are also 2,129 acres of other field crops such as soya beans, sugar cane and peanuts. A modest production of fruit is expanding quickly.

Fish farming in the New Territories is of increasing importance. It is mainly located near the Deep Bay coast (Map I), and totals 1,082 acres. Grey mullet is the chief species, with carp, and edible goldfish also of importance. Supplies of fry are often imported from China.

With regard to animal industries the shortage of land means that pigs and poultry are the principal food animals reared in the Hong Kong area. As with so many aspects of the Colony the Chinese strains are being replaced by crosses or European stock such as Berkshires, Mid-Whites and Large-Whites in the pigs. Artificial insemination is expanding rapidly as a technique in local pig production.

In the wetter parts of the Colony ducks and geese are raised both for domestic consumption and export. Pigeons have become a thriving industry and those marketed in 1962 brought in about £115,000. With regard to cattle they are kept mainly for work purposes with only the surplus slaughtered. There is one large dairy farm on Hong Kong Island and some smaller ones on the outskirts of Kowloon.

As has been seen afforestation is a comparatively new phenomena in the Colony. In the main hills are grass covered with shrubs and small stands of scrub forest in the more remote areas. Villagers have been in the habit of cutting grass for fuel which, along with the dry season hill fires, has led to the destruction of vegetation and the ensuing development of soil erosion over much of Hong Kong. So far 11,000 acres of forest have been planted, mainly with pine and Brisbane box. Although the encouragement of private plantation is promoted villagers are not convinced of the profitability of forestry, a tree takes too long to grow. Therefore, as in China, forestry is mainly the concern of the Government.

Fishing

In 1960 the various Government bodies dealing with the fishing industry were formed into the Co-operative Development and Fisheries Department, to which was added in the same year the Fisheries Research Unit. The Department now covers most aspects of the fishing industry ranging from research to the provision of loans for fishermen to use in mechanising their boats.

Hong Kong's fishing fleet is the largest of any centre in the Commonwealth. There are 10,000 junks, and 25 trawlers of Japanese design. There are approximately 80,000 seagoing fishermen (mainly Tanka). The junks are built locally and 95% of the fleet is owner-operated. In 1958 the People's Republic of China imposed restrictions on fishermen from Hong Kong using the Kwangtung area so that they now have to land part of their catch in China with quotas varying from time to time and the restrictions being imposed with varying rigidity. 5,199 junks are now fully mechanised (1963 figure).

Fish are handled in Hong Kong by the Fish Marketing Organisation which

pays its costs by a 6% commission on all sales in wholesale markets. Since 1956 and the Marketing Ordinance this Organisation has been assisted by the Fish Marketing Advisory Board. Since 1950 the main export market for Hong Kong's fishing industry has been closed following an embargo placed on the importation of salt and dried fish from the Colony by the People's Republic of China and so the domestic market is the all-important one. During 1962 fresh fish sales in Hong Kong increased by 11%, whilst salt and dried fish sales decreased by 18%, but unfortunately for the fishermen the wholesale price of fresh fish fell by 12% and that of salt and dried fish by 19% compared to 1961.

In 1950 a Registrar of Co-operative Societies was appointed. The co-operative movement has since made great progress both in the fishing industry and amongst the peasant farmers. Many of the co-operative societies operate their own loan schemes, notably the fishermen's. In 1962 29 new co-operative societies were registered, making a total of 377.

Although the Government of Hong Kong is taking an increasing part in the farming, fishing and forestry of the Colony there is again a marked contrast to the developments north of the Sino-Hong Kong boundary. Hong Kong is still very much a centre of private enterprise, perhaps the one exception being forestry where the reaction of the individual tends to be the same throughout the world. Similarly, the Chinese character of farming and fishing is changing in Hong Kong, whether it is in the introduction of European types of pig, European methods of mechanised fishing or the greater emphasis on market gardening at the expense of South China's traditional crop of rice. Such provinces of China as Kwangtung are also changing, but in a somewhat different way, as, for example, the continuing emphasis there on rice production or the use of Chinese strains of pig. Hong Kong has an economy developed to cater for the needs of the non-Communist

world whilst Kwangtung is more inward looking and generally isolationist.

Mineral Resources

Iron ore, wolframite and graphite are mined in the Colony, and feldspar, kaolin and quartz exploited by opencast methods. Japan takes Hong Kong's exports of iron ore, the United States wolframite, Japan, Taiwan and the Philippines the kaolin whilst the feldspar and quartz is all consumed domestically by the enamelware and ceramic factories.

The iron ore is found at Ma On Shan (Map I) and is handled by a dressing plant with a daily capacity of 800 tons. A second dressing plant was opened in 1960 to treat low grade ores. Wolframite was only mined at Needle Hill in 1963 as the world market was previously offering a price which made Hong Kong's modest deposits uneconomic. Although Hong Kong has a range of mineral resources they are of limited economic importance being in small and scattered deposits which are expensive to work. Of late prospecting has not brought to light any worthwhile new mineral deposits.

The control of all minerals is the right of the Crown (Mining Ordinance of 1954). The Commissioner of Mines issues prospecting and mining licences, and the Land Officer mining leases. Prospecting licences are valid for 6 months up to a total of 5 years, as are mining licences, although the latter can be extended with the Governor's consent. Mining leases can be granted for up to 21 years. In 1962 there were 2 mining leases, 16 mining licences and 5 prospecting licences, all of which had been issued to individuals or very modest mining companies. The Superintendent of Mines claims a 5% royalty on all mineral sales. Again, although the Government of Hong Kong plays a substantial part in the mineral development of local resources, the emphasis in the Colony is upon private

development which is a concept hostile to the present attitude of the Government of the People's Republic of China, and must lead to a divergence of attitude either side of the boundary. However, in conclusion it should be stressed that the mineral industry is not a good example to quote because of its insignificance in the economy of Hong Kong.

Industry

Before the Second World War industry was of secondary importance to Hong Kong's entrepôt trade. But 'between 1950 and 1960 (Hong Kong) changed from being predominantly a trading centre closely linked with the China trade, but an industrial nonentity, into a combination of two things: a clearing-house for much of the trading and banking functions of other countries in the Far East and a manufacturing and exporting country of light industrial products'.¹ Local industry now accounts for over 75% of Hong Kong's total exports.

The first of Hong Kong's industries had been the repair and building of ships. In 1843 the 80 ton 'Celestial' had been launched. Today Hong Kong is capable of producing vessels of over 6,000 tons deadweight, although the building of junks and pleasure craft finds a more readily available market. Of greater importance is the ship-breaking industry in which Hong Kong is one of the world's main centres. In 1962 amongst the vessels broken up at Hong Kong was the 'Strathnaver' (22,270 gross tons), the 'Canton' (16,003 tons) and the U.S. aircraft carrier 'Puget Sound' (24,560 tons). Heavy industries include the production of machinery for export to over 70 countries (notably moulding machines, presses and planing machinery).²

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1. R.H. Hughes: 'Hong Kong - Far Eastern Meeting Point'; The Geographical Journal Vol.129, December 1963. p.460.
 2. The following have been of importance in this section: I. Ingrams: 'Hong Kong'; H.M.S.O., London 1952. The Hong Kong Annual Reports & E.F. Szczepanik: 'The Economic Growth of Hong Kong'; Government of Hong Kong 1958.

In 1899 a spinning mill was started, but closed later. In 1910 the knitting of cotton singlets and vests was started with greater success. In 1922 a weaving factory with 30 hand looms opened. At present the textile industry is Hong Kong's largest industry with 123,670 workers or 42% of the total labour force in registered and recorded factories and industrial undertakings. In 1962 the textile industry's exports accounted for 53% of the total exports of domestic products. The manufacture and processing of cotton goods is the most important within the textile industry. There are 625,000 cotton spindles and production in 1962 was 250 million pounds. Hong Kong's cotton mills are amongst the most well equipped and modern in the world.

Hong Kong has about 20,000 looms producing piecegoods and in 1962 510 million square yards came from them. The Colony also weaves an impressive range of other materials including rayon, carpets, woollen piecegoods and military webbing. The most important garment production is shirts, but the whole range of garment manufacture is participated in.

Textiles have tended to dominate local industry to an unhealthy extent so efforts are being made to both diversify within the textile industry (e.g. woollen knitwear exports were worth approximately £6,000,000 in 1961 (in Hong Kong dollars 91,200,000), but increased by 98% in value in 1962) and in the introduction of new industries. For example in the latter part of 1959 the beginnings of an electronics industry was seen with the establishing of a firm assembling transistor radios from imported parts. By the end of 1962 there were 20 electronics companies. In 1961 263,000 transistor sets were exported whilst this figure rose to 1,047,000 radios in 1962. Similar success has been achieved in plastics, air conditioners,

furnishings, cameras, binoculars, stainless steel cutlery, clocks and pleasure craft. The rubber industry is also expanding quickly and absorbs over a quarter of the Colony's kaolin production.

Industry in Hong Kong benefits from low taxation, plentiful and reasonably cheap labour, a free port and outstanding shipping and commercial facilities. There are no local trade restrictions. These factors have so far successfully counteracted the handicaps of an absence of raw materials locally, a scarcity of water and the limited land available for industrial expansion. Hong Kong is at present riding a trade boom. Imports in 1962 were 12% higher than in 1961 and stood at 6,657,000,000 Hong Kong dollars (about £430 million). Food was the principal import and accounted for 24% of the total, but also of prime importance were raw materials and semi-manufactured goods. China provided 18% of the total value in imports, and Japan was the next most important. The value of the Colony's domestic exports was about half that of the imports in 1962 and stood at 3,317,000,000 Hong Kong dollars, which was an increase of 13% over 1961 (a Hong Kong dollar is worth 1/3d.) By value the textile and garment industry provided 52% of the domestic exports, but plastic goods came second with 11%. Of prime importance to Hong Kong is Commonwealth Preference and Commonwealth countries in 1962 took 46% of domestic exports (by value); the United States took 26%.

The entrepôt trade was worth 1,070,000,000 Hong Kong dollars in 1962 (about £70 million). This was an increase of 8% over 1961. Malaya was the most important, with Japan next and China third in this trade of re-exporting. The chief commodities were textiles, jewellery, animal and vegetable raw materials, pharmaceuticals and machinery.

Since 1958 there has been a campaign launched by the Hong Kong Tourist

Association to attract tourists to the Colony. This industry expanded by 13% in 1962 (total number of visitors was 253,016). 35% were Americans and a further 35% were from Commonwealth countries, whilst the majority of the remainder came from Southeast Asia. In 1959 Hong Kong only had 2,300 hotel rooms suitable for tourists, but by the beginning of 1964 this figure had passed the 6,000 mark. The Tourist Association's 'Hong Kong Travel Bulletin' now has an overseas circulation of more than 11,000 copies.

Perhaps before concluding the paragraphs on industry it is profitable to look at one of the commercial enterprises within Hong Kong, in this case ³ banking. The Banking Ordinance states that no institution may engage in banking unless it has a licence from the Governor in Council. At the beginning of 1963 there were 92 licences valid and 46 banks permitted to deal in foreign exchange. During 1962 the monthly clearings of the Hong Kong Clearing House averaged £146,625,000. On December 31st 1962 deposits in the banks of Hong Kong totalled £269,437,500, and loans and advances to industry came to £178,062,500.

In contrast to China's concentration upon the development of heavy industry Hong Kong is a producer of consumer goods. The economy is a free enterprise one with Government participation strictly limited. Hong Kong depends on world markets to a far greater extent than the industry of China apparently does. To a certain extent Hong Kong epitomises the American and Western European approach to industrial and commercial development, whilst China ably represents the Marxist-Leninist concept of the planned economy. Hong Kong's trade with the People's Republic of China is still of impressive proportions, but it does little to break down the differences in outlook on

3. H.J.Tomkins: 'Report on the Hong Kong Banking System and Recommendations for the Replacement of the Banking Ordinance, 1948'; Hong Kong Government, 1962.

either side of the boundary. But for the boundary it can be safely assumed that Hong Kong would now be part of the great resurgence of China, but of far less significance industrially and commercially.

Communications

Hong Kong grew up because of its position as a communications centre on the coast of China. It was a focus for the routeways of much of the eastern half of Asia. Initially of first importance were marine communications which are today centred on the Port of Victoria (Map I) between Kowloon and Hong Kong Island. Fifty-two moorings for ocean-going vessels are maintained by the Marine Department and there is a wharf storage capacity of about a million tons. 700,000 gross tons of shipping is registered at Hong Kong. During 1962 7,137,221 tons of cargo was landed and 2,138,259 tons loaded.

Although marine transport is of great importance to the Colony with regard to the effectiveness of internal administration and the significance of the Sino-Hong Kong boundary it is land communications which predominate. As Map I shows there is the Kowloon to Canton railway running from the Kowloon peninsula to Sham Chun on the boundary where it joins the Chinese section. Since 1949 passengers have had to change trains at the northern bank of the Sham Chun River where the boundary comes into being which entails a walk of about 300 yards between the two termini. Goods traffic is permitted by the Chinese to travel through without transshipment. On the British section there are 12 passenger trains each way per day and usually about 2 goods trains. Since 1949 the Kowloon to Canton railway has not functioned with the freedom it enjoyed under the Nationalist regime. 89% of the passengers (6,231,789 in 1962) carried travel within the Colony area.

At present Hong Kong is engaged in the extension of the road network within the Colony (Map I). During 1962 a further 8 miles of Government maintained roads came into use, bringing the total to 524 miles. There is 192 miles of road on Hong Kong Island, 141 miles in Kowloon and 191 miles in the New Territories. Increasing traffic volume has demanded the improvement and widening of present roads more than the building of new motorways. In the main Hong Kong's roads are good by European standards and impressive by Asian, serving the centres of population with efficiency. No other state bordering China is as well bound together by its transport network. The two most poorly served areas of the Colony are the Island of Lantau and a little of the eastern part, but population densities are low here. The number of vehicles registered in Hong Kong as of December 31st 1962 numbered 63,056 which was an increase of 7,230 over 1961. With regard to the Sino-Hong Kong¹ boundary 'there is no through motor traffic'.

The first flight to Hong Kong by aircraft was in 1911, but civil aviation was unimportant until the 1930's. The original grass airfield on the north shore of Kowloon Bay was extended and Hong Kong linked with the London-Singapore-Australia weekly Imperial Airways service in 1936. In 1937 Pan American Airways started a Hong Kong-Manila-San Francisco service. Following the Second World War civil aviation in Hong Kong restarted with vigour. There was a need for a more ambitious airport and in 1956 a beginning was made on a project to reclaim a site from the waters of Kowloon Bay. A runway 8,340 feet long was opened in 1958, and a new terminal in 1962. There are two locally based airlines, Cathay Pacific operating to India, Japan,

1. R.H.Hughes: 'Hong Kong - Far Eastern Meeting Point'; Geographical Journal, Vol. 129, December 1963, p.450.

the Philippines and Indonesia, and the Macau Air Transport Company flying to Macau. 22 international airlines use Hong Kong on scheduled flights. In 1962 passenger air traffic increased by 23.6% (292,007 in and 299,397 out), freight by 27.1% (2,097,015 kilos in and 4,883,108 kilos out), and mail by 3.01% (637,291 kilos in and 907,052 kilos out).

Also important in the communications of Hong Kong is the telegraph service (3 million telegrams in 1962), the radio telephone serving 84 countries, Telex which links Hong Kong with 53 countries, and the Hong Kong Telephone Company with 150,000 subscribers and reputedly the lowest charges in the world. Also there are 42 daily newspapers, and 20 which appear once or twice a week. The bulk of the daily paper sales are of the Chinese language newspapers (600,000 per day), despite an increasing number of English speaking Chinese (there are 3 daily English language papers and 4 weeklies). There are three broadcasting organisations, Radio Hong Kong (government owned) and Commercial Radio each have an English and Cantonese programme operating for 17 hours daily. Rediffusion has two Chinese and one English programme running 17 hours daily. Although only about 150,000 radio licences are issued annually it can be said with reasonable certainty that this is only a part of the total number of radios within the Colony. Probably most families have a radio, and certainly all are within easy range of a radio, in contrast to the situation which prevails in the Mongolian People's Republic. In 1957 Rediffusion opened the first television service which has been growing rapidly.

With regard to communications at present Hong Kong is tied to the non-Communist world. There is no road link with Communist China, and only a tenuous rail connection. Within the Colony itself there is a comprehensive

transport network, and the ready availability of newspapers and radios provides a vehicle for the imposition of the Government's authority. In contrast to most of the other border states dealt with in this study Hong Kong has an adequate communications system for effective administration.

CHAPTER FIVE : Conclusion

With regard to physical geography Hong Kong is part of southern China. But such considerations as the physical nature of the Colony can be overwhelmed by aspects of political and human geography when dealing with such questions as the viability of Hong Kong. Is the Colony developing into a separate entity? Despite the area being physically part of China does the Sino-Hong Kong boundary represent a division between two increasingly divergent areas?

Hong Kong was established during the Nineteenth Century as a centre for British trade with China. It has fulfilled this purely economic function admirably, and even since the advent of a hostile Chinese government after 1949 trade with the mainland of China has been sizeable. Although much of the area of what is now Hong Kong is to be returned to China at the end of this Century, if the treaty obligations by which the British acquired the New Territories are to be fulfilled, there is at present in being a Colony which is alien in many ways to mainland China.

Hong Kong is now a Colony which is economically independent. Despite having been established to cater for trade with China since 1945 it has broadened economically so that this original purpose is now comparatively unimportant. If Britain withdrew from Hong Kong there is little reason to think other than Hong Kong could continue as an economically viable state. The Colony's industry is expanding rapidly, the port continues to be of importance as an entrepôt, and the limitations of agriculture and mineral resources do not inhibit the well being of the area. Economically absorption into China would be far less attractive than an ultimate independence. Hong Kong's trade is with the world and a more provincial role would mean less prosperity.

By Asian standards Hong Kong has reached a sophisticated stage of technological development as has been shown in the description of manufacturing in this Section. It is perhaps unfair to make a comparison with those other states sharing a boundary with China because of Hong Kong's modest size, but it is the area with the most comprehensive communications network and probably the most effective administration.

Politically Hong Kong's position is less enviable. Her citizens may have one of the highest standards of living in Asia, but their future is far from secure. Although representatives of the Chinese population have a say in the governing of the Colony Hong Kong is still largely administered from London. The British are in a difficult position as the New Territories have to be returned to China in a little over 30 years time which makes grooming for independence in Hong Kong somewhat futile. As yet China has been content to allow Hong Kong its independence, probably because it is such a useful contact with the West and it is only a question of waiting for the British treaty rights to expire anyway. There are many forces for integration within Hong Kong, but the uncertainty of the future is a disintegrating factor which overwhelms all else.

The bulk of the population of the Colony are Chinese, and yet Hong Kong is becoming increasingly different in characteristics and outlook to China. Many of the inhabitants of Hong Kong are refugees from the present Peking government, whilst the rest cling to the older Chinese way of life which is being demolished within China. The changes which are occurring amongst the Chinese of Hong Kong differ from those of China. Like Japan Hong Kong is a country within Asia which is becoming 'westernised', certainly in the outward appearances of the people and their environment (e.g.

skyscraper flats and offices, neon signs, etc.), and also probably in many of their attitudes. China's path is a unique form of Communism and the end product may bear little resemblance to the industrial societies of such European and American influenced countries as Hong Kong and Japan.

The administration within Hong Kong makes itself felt throughout the Colony. Even the New Territories' clan system is fast disappearing so that it cannot claim to hinder Hong Kong's functioning as a unit. There are language differences which might lead to minor nationalisms, but the increasing predominance of Cantonese should eventually provide uniformity.

Hong Kong has the advantage of being part of the mainland of China which means that the population is much more willing to think of it as 'home' in contrast to the Overseas' Chinese in places like Indonesia or Thailand. The Hong Kong Chinese have also enjoyed equality of rights with the British and other races since 1865, with the exception of the Japanese occupation during the 1940's, an event which led to greater appreciation of British rule. Similarly, a steady stream of refugees from Communist China has done much to convince the inhabitants of Hong Kong that life under Peking's rule is not what Mao's propaganda would make it out to be.

The Sino-Hong Kong boundary comes within Boggs' 'Physical' or Harts-horne's 'Subsequent' categories of classification, being delimited and demarcated along a river. As befits a boundary line between a Communist state and a 'Western' colony the Chinese have endeavoured to restrict movement across it, co-operating with the British to inhibit the number of refugees from Kwangtung to Hong Kong. China is hostile to Hong Kong and intends that the boundary should be an effective division within the landscape. The fact that the line is delimited along a river is of no significance as if it was a geometric line such as to be found along parts

of the Sino-Mongolian boundary it would be imposed with equal effectiveness. Except for a certain freedom with regard to trade the function of the Sino-Hong Kong boundary is to cut off a Communist state from a Western committed area until such time as the latter can be successfully absorbed into the former.

Although Hong Kong has reached a stage of territorial maturity the same cannot be said for China. There is no possibility of either the British government or Hong Kong making claim to territory at present under foreign rule, but Peking can be expected to continue to expand its administrative area. Despite Hong Kong being more of an entity than China its independence will always be a relative thing; if Britain withdrew it would seem unlikely that China would permit the survival of a city-state of Hong Kong.

Hong Kong is the most cohesive of the states bordering China, and yet an area unlikely to survive as an independent country. The Colony enjoys a smoothly working administration and a good communications network. It has a predominantly Chinese population hostile to its northern neighbour and enjoying an increasingly prosperous economy. 'Nowhere in the world are there better and more comprehensive schemes for the advancement of literacy and learning than in Hong Kong'¹ and with education there comes an increasing influence of 'Western' culture and thought. All children have primary school places, with adequate facilities for the abler to go on to secondary school and university. The educational system is modeled upon the British, and if China does not gain Hong Kong until 1897 when the New Territories' lease runs out Peking may find the Colony harder to assimilate than her other problem areas of Tibet and Sinkiang. At present it can be stated that Hong Kong is functioning effectively as a political unit, and that the Sino-Hong Kong boundary provides a division within the landscape. However, this situation is not expected to survive.

1. British Survey: 'Hong Kong'; No.209, London 1962 ,p.19.

SECTION SEVEN : The Mongolian People's Republic

The Communist Borderland

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CHAPTER ONE : Historical Development.

Pre-Nineteenth Century A.D.

Before the Nineteenth Century the cultural differences between what is now the Mongolian People's Republic and the People's Republic of China were due mainly to economic factors. Pastoral nomadism predominated in Mongolia whilst the Chinese favoured irrigated agriculture. Lattimore² writes 'it seems probable that what took place during the later neolithic and the Bronze Age, from perhaps 3000 B.C. to about 500 B.C., was a broad but very slowly accelerating process of differentiation'. This was not limited to a division along the present Sino-Mongolian boundary, but was over a wide area. In the centre of the developing Chinese culture (i.e. the Yellow River bend) the change was conspicuous by the second millennium B.C., but nearer the edge of the steppe the effects were not beginning to show until perhaps the second half of the first millennium B.C. During the antecedent period culture was at the same level in the various regions. The Mongols were probably of the same stock as the northern Chinese but were culturally different after the development of higher agriculture by the Chinese. After the Chinese had abandoned the crude hoe agriculture and progressed in agricultural techniques they were more restricted in their geographical environment. It was possible for the Chinese to spread out-

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1. In the history of Mongolia chapter the following references have been used extensively: G.Friters: 'Outer Mongolia & Its International Position', Johns Hopkins University Press, Baltimore 1949; O.Lattimore: 'Nationalism & Revolution in Mongolia', Oxford University Press, New York 1955, 'Studies in Frontier History', Mouton, Paris 1962, 'Inner Asian Frontiers of China', Beacon edition, Boston 1962; & P.S.H.Tang: 'Russian & Soviet Policy in Manchuria & Outer Mongolia 1911-1931': Duke University Press, Salem 1959.
 2. O.Lattimore: 'Inner Asian Frontiers of China'; Beacon edition, Boston 1962, p.55.

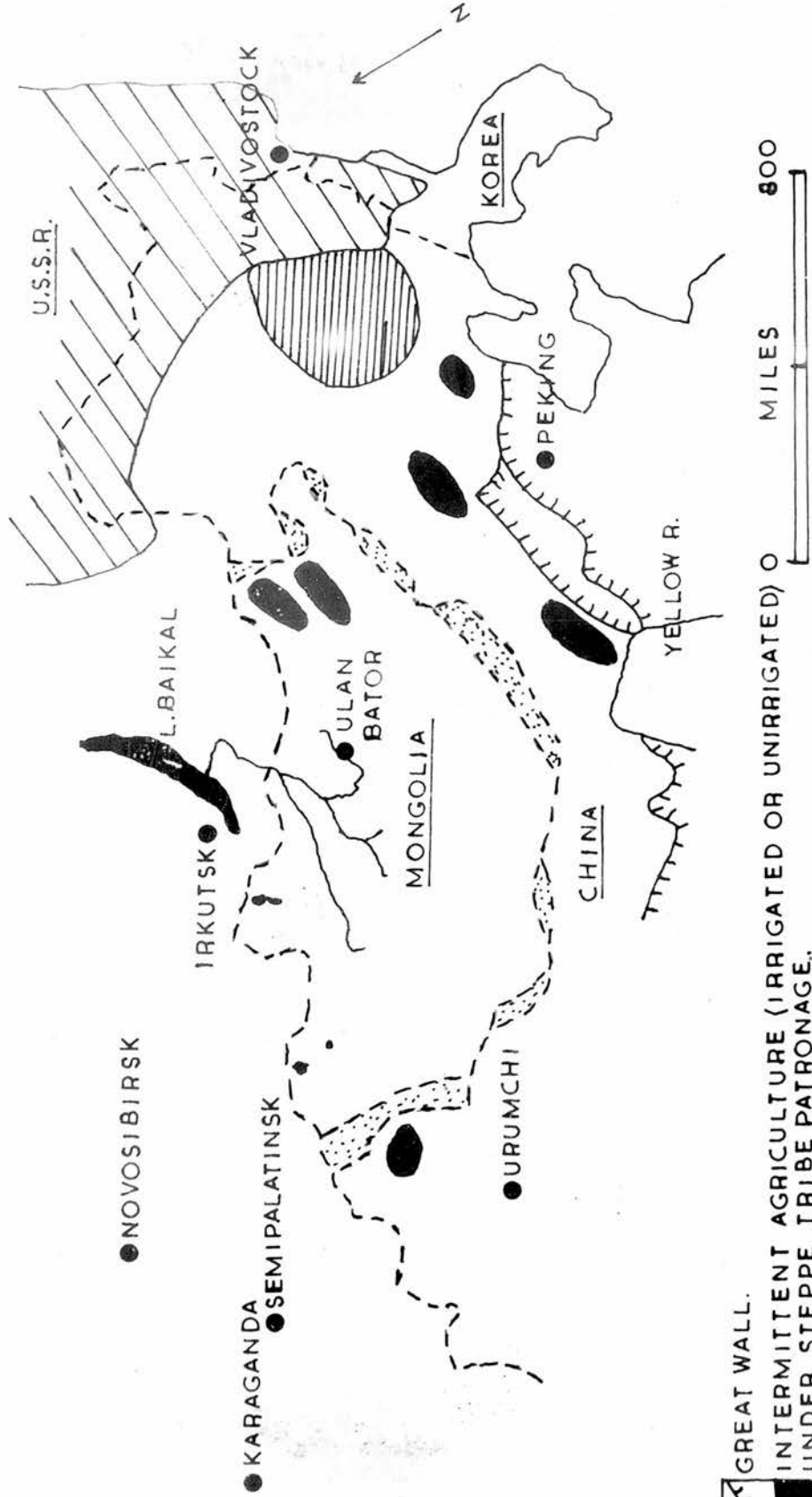
wards from the great bend in the Yellow River to the Great Plain of northern China and there assimilate the tribes at a lower cultural level because such geographical factors as climate, relief and soil permitted the practising of their form of cultivation. But the steppe was an environment which discouraged the use of the Chinese irrigated agriculture and enabled the Mongols to resist any northward advances of the former. There was a broad frontier zone between the lands of the Chinese and those of the Mongols or 'barbarians' for there was no precise line between those areas which could support an irrigated agriculture and those which would not. The differentiation between the Chinese cultivators and barbarian herders developed in the frontier area by experiment and initially the former did more farming than the latter, whilst the barbarians tended more towards the keeping of animals. Increasingly the steppe environment became more marginal to the developing techniques of Chinese agriculture until the steppe society had at last to abandon any attempt to emulate the cultivators of the agriculturally more favourable Chinese environment and commit themselves to the steppe and the sort of economy it favoured. After committing themselves the steppe peoples then had to adapt fully and efficiently to their environment. This meant a limited use of agriculture and a specialisation on pastoralism.

The specialism in irrigated agriculture was reached much earlier in China than pastoralism was further north. By the second millennium B.C. the Shang people of Honan-Shansi had already committed themselves to agriculture and an urban life. It is not until the second half of the first millennium B.C. that there is reference in Chinese records to horsemen in the north. The Chinese had used chariots long before this, but apparently their former foot-slogging rivals along the frontier had now taken to the

MAP I. SINO-MONGOLIAN BORDER.

AFTER W.A.D. JACKSON 1962, P. 2, &
O. LATTIMORE 1962, P. 52.

POLITICAL BOUNDARY
DISPUTED AREAS



GREAT WALL.
INTERMITTENT AGRICULTURE (IRRIGATED OR UNIRRIGATED) O
UNDER STEPPE TRIBE PATRONAGE.
TUNGUS FOREST TRIBES
MEETING OF TUNGUS FOREST TRIBES, MONGOL STEPPE
TRIBES & CHINESE AGRICULTURE.

horse. The use of the horse led to a quick development of a society of mounted nomads who challenged the Chinese in the area with greater effectiveness. Lattimore³ puts the date of the developing clashes between the mounted nomad society of the steppe and the agricultural economy of the Chinese areas as in the Fourth and Third Centuries B.C. There was a development in the steppe areas of a specialised use of horses with the late refinement of the stirrup which permitted, amongst other things, efficient mounted archery. Pastures were all-important to the Mongols and there was a banding together of men under a leader to protect their nomadic territories. A society of powerful princes grew out of these first measures to protect the rights of the individual to graze his herd. The self-sufficiency of the nomad economy led to a demand for the sort of luxuries only a settled society could produce and which were used to distinguish the great from the lowly in the Mongol power strata. The tribal leaders were of immense power because of their right to regulate the tribe's pastures. The leader drew tribute from his followers who also served as his warriors. The chief might impress his followers further by at times importing Chinese labour to start up a certain amount of agriculture in marginal areas (Map I shows the general areas used). However, it was always in the interests of the leader to keep in being a highly mobile nomadic economy on which his power rested securely.

Although the horse was the vehicle of war sheep were of greatest importance in the Mongol economy. Sheep provided felt for the tent in which the Mongol lived, skins for clothing, milk, butter and cheese, meat

3. O.Lattimore: 'Origins of the Great Wall: A Frontier Concept in Theory & Practice'; Geographical Review Vol.27, October, 1937.

in winter and dung for fuel.

The conflicts of the Chinese and Mongols along the frontier were those of a wealthy society labouring against a mobile way of life. During periods of strength in China the Chinese were able to mount armies of professional cavalry to compete with the Mongols in their own type of warfare, but this was so expensive that it could not be continued for any great length of time. The effectiveness of the Mongol mobility was later challenged by the trade in Mongolia being under the patronage of the princes and wholly in Chinese hands, and the spread of the Lamaist form of Buddhism.

Perhaps the greatest period of Mongol history was under Ghenghis Khan. He came from the lower ranks of the tribal nobility and was stimulated in his early ambitions by a desire to revenge the death of his father who had been killed in a Mongol conflict. Ghenghis Khan launched upon a series of tribal wars which eventually placed each unit under a chieftain loyal to himself. To weld together the Mongols without depriving them of their great strength of mobility by making them take to agriculture, Ghenghis Khan chose Turkic Uighurs from the cases of Sinkiang to create a written Mongol language and a primitive civil service. The use of Uighurs who were Nestorian Christians or Moslems and spoke a Turkic language enabled the Mongols to bypass the Chinese scholar-gentry in their administration needs.

Ghenghis' grandson Kublai Khan was the first Mongol to rule all of China and continued his grandfather's policy of making sure the Mongols were not stifled by Chinese bureaucracy. From 1280 to 1368 the Mongol Yuan Dynasty ruled China largely through the Turkic Uighurs, Persians and

a sprinkling of other nationalities such as the Italian Marco Polo. At its height the Mongol Empire stretched from the lands of the Rus in Europe to the Pacific Ocean, with China the richest part of it.

The efforts of the Mongols during their rule of China to produce a Mongol culture to compete with the dangerous sophistication of the Chinese mandarins led to the experimenting with Tibetan Lamaism. This modified form of Buddhism vanished from Mongolia with the fall of the Yuan control of China and the advent of the Ming Dynasty in 1368. The Mongols, having returned to their steppelands, had no need of a religion to bind together the pastoral and agricultural dominions of the Empire. When Lamaism reappeared in the Sixteenth Century the first Mongol converts were those nearest to China in what is now Inner Mongolia. The Mongols of Inner Mongolia were more sympathetic to the Chinese Ming Dynasty and with their aid the Chinese had negated the threat of another Mongol invasion, although they had been unable to subject the area of Outer Mongolia. The Great Wall frontier had been turned over to the Mongols of Inner Mongolia to use against the more northerly Mongols. The Ming Dynasty therefore had a protective barrier of Mongol vassal states. But from the Sixteenth Century onwards the Mongol tribes along the loop of the Yellow River regained their strength and returned to pastoral nomadism and full mobility. From 1530 until his death in 1583 the Mongol leader of these tribes, Altan Khan, built up an empire which stretched to Tibet. The Mongols made frequent excursions into Shensi, Shansi and threatened Peking. Altan Khan re-introduced Lamaism to avoid the adoption of Chinese culture in his territories.

The death of Altan Khan also marked the rise of Manchu power along the frontier. The Manchus were in alliance with the Eastern Mongols. The Manchus and their allies launched an attack into China which took Peking in

1644. Inner Mongolia went over to the Manchu cause in order to gain some of the benefits of the fall of China without being faced with a challenge of Manchu power from China. This gave the Manchus control of Manchuria, Inner Mongolia and Kansu along the northern frontier. To this inner frontier zone the greatest of the Manchu Emperors K'ang Hsi (1662-1723) added an outer frontier area which owed allegiance to China, but was not directly ruled by the Chinese; this included northern Manchuria, Outer and Western Mongolia, the Turkic peoples of Sinkiang and Tibet. This was achieved by waiting for the Western Mongols to exhaust themselves in an attempt to create a new Mongol Empire centred on the Altai Mountains and including Outer Mongolia, Sinkiang and Tibet. The Mongols of Outer Mongolia, the Moslem rulers of Sinkiang and the Tibetans asked for Manchu help against the Western Mongols and the latter's fledgling empire fell apart.

By this time the Lamaist Church was of prime importance in the Mongol lands. Living Buddhas had equal importance with the hereditary princes and the Manchus managed to create a Mongol church which was independent of the princes. The sons and nephews of ruling princes could not be selected as Living Buddhas.

With the limitation of Mongol power under the Manchu Ch'ing Dynasty nomadism was restricted within certain boundaries. The building of religious foundations meant fixed property with territory attached and with a Living Buddha controlling the inhabitants. Mobility was of lesser importance. There was an influx of Chinese traders working for a number of large companies, and Chinese artisans. The unemployed Mongols went into the monasteries so that as many as 40% of the male population might be monks.

Nineteenth Century

Outer Mongolia, or what is now the Mongolian People's Republic, was never as effectively under the control of China, nor suffered as much from Chinese and Lamaist exploitation as Inner Mongolia. The Chinese traders, working in conjunction with the princes and lamas, made huge profits out of the Mongols. Interest paid on debts might be as high as 500% per annum and when the Ch'ing Empire fell in 1911 each Mongol household had a Chinese trading debt of 500 ounces of silver if the total of 15,000,000 taels is averaged out throughout the Mongol areas.⁴

The Mongols were obliged to raise military contingents for the Chinese Emperor when required to and during the Taiping uprising and the wars against Britain and France in the Nineteenth Century Mongol troops were very much in evidence. Almost all the Mongols were vassals of the Ch'ing Emperor by the end of the rule of Ch'ien Lung (1736 to 1796 A.D.) and under this vassalage, plus the parasitic administration of the Lamaist church and princes, the Mongols did not prosper.

Under the influence of the lamas the Mongols lost their warlike demeanour. By the Nineteenth Century many of the monasteries owned 50% of the land and 70% of the livestock. The average Mongol was better fed than the average Chinese, but he should have been much more prosperous.

The subordination of the Mongol economy to Chinese traders during the Nineteenth Century was further emphasised by the influx of Chinese settlers during the latter part of the Century. The Chinese immigrants' agriculture was not as intensive as that of China as the southern margins of the Mongol territories were less able to support irrigation, but it

4. O.Lattimore: 'Inner Asian Frontiers of China'; Beacon edition, Boston 1962, p.95.

changed quickly the local economy. The railways made it possible to export into China the grain produced in Inner Mongolia which had not been feasible with bullock transport. A railway line was driven from Peking into Inner Mongolia. Another new force which backed up the Chinese immigration was the use of efficient firearms.

Twentieth Century Mongolia

As has been seen at the beginning of the Twentieth Century the term 'independence' was a relative thing for the Mongols. Due to their position they were open to the influences of both China and the vigorous, more recent power of Russia. The development of a special relationship with first Tsarist Russia, then after 1917 the Soviet Union, was largely the outcome of the challenge which the Outer Mongolians felt China presented. The challenge from the south was one of displacement rather than mere alien rule. The Chinese immigration into Inner Mongolia was actively encouraged by the Ch'ing Empire during its last decade. This Chinese immigration awakened a sense of nationalism amongst the Mongols north of Inner Mongolia. Initially the nationalism was amongst the lamas and feudal chiefs who found their power challenged by the Chinese to a greater extent than prior to the immigration. In desperation the leaders of Outer Mongolia appealed to St. Petersburg.

Amidst this turmoil of Mongolian diplomacy the Manchu Empire was fast failing. Although the Chinese Amban in Urga (Ulan Bator) might forbid any intercourse between Outer Mongolia and Russia he had only a handful of troops with which to stop the Mongolian delegation going to St. Petersburg in June of 1911. Encouraged by revolution in China, and aided by the Russians, the Mongols in November of 1911 declared their independ-

ence from the Manchus before the Dynasty had actually fallen and made the Living Buddha of Urga the new head of state.

The new Republic of China felt it necessary for reasons of prestige to try and regain the allegiance of those areas which had been under the control of the Manchus. President Yuan's efforts to charm the Outer Mongolian administration bore little fruit. The Chinese became aware of the efforts of the new Mongol state to win the sympathies of the princes of Inner Mongolia. Swift and bloody action was taken against any signs of revolt in Inner Mongolia, and troops were sent to the western part of the province to reinforce the Chinese hold. A protest was presented to the Russian Government asking them to abstain from interfering with any measures the Chinese might feel necessary to re-establish order in Outer Mongolia. The Russian Minister in Peking offered the Chinese an understanding over Outer Mongolia, but the Government of the Republic could not agree to such a move in the face of hostile public opinion.

Towards the end of 1912 the Russians concluded a treaty with the Living Buddha and the Mongolian princes recognising the end of the former relationship between Outer Mongolia and China. Although China had been sending fresh divisions to Inner Mongolia she lacked the strength to retake Outer Mongolia. The public outcry within China was allayed by launching a war loan, an action which restored a certain amount of calm. In November of 1912 President Yuan received a telegram from the Living Buddha announcing Outer Mongolia's Declaration of Independence.

Pressure was being exerted upon China by Russia to recognise three conditions with regard to Outer Mongolia, namely no occupation, no administration, nor any colonisation. Close relations were developed between Urga and St. Petersburg which more or less forced China to open negotiat-

ions with Russia in December of 1912. The Chinese submitted totally unacceptable drafts for a treaty over Outer Mongolia; these were rejected by Russia. St. Petersburg threatened China with retaliatory action should she launch an attack into Outer Mongolia. Opposition to the moves of the Chinese Government was met in the newly created parliament. In July of 1913 the Chinese Foreign Minister resigned in despair. Finally an agreement was reached whereby Russia recognised Chinese suzerainty over Outer Mongolia, but China had to acknowledge the virtual independence of the Mongolian Government and agree not to send troops or colonists into Outer Mongolia. In order to put the treaty into force President Yuan procured the formal liquidation of the Kuomintang, which provided much of his opposition in China.

In December of 1913 the Mongolian Prime Minister gave the Chinese Minister in St. Petersburg a note protesting against the Russo-Chinese Treaty and declaring afresh Outer Mongolia's independence. In September of 1914 a tripartite conference was held with the Chinese delegation in an aggressive mood as Russia was involved in a European war. Their demands came to what was practically the reduction of Outer Mongolia to a Chinese colony. Negotiations were broken off until the beginning of 1915 due to the Sino-Russian impasse. The Chinese demanded equality of trading rights with the Russians in Outer Mongolia which was refused. In June of 1915 a tripartite agreement was finally signed in which China recognised the Sino-Russian Treaty of 1913. A Chinese representative was to take up residence in Outer Mongolia as a sign of the Suzerain of the Republic of China.

Owing to their commitments in Europe, and later the Communist Revolt of 1917, the Russians began to lose their former dominance in Outer Mongolia.

In May of 1917 the increasing Chinese economic position was demonstrated with the opening of one of their banks in Urga. In 1918 the Chinese reinforced their representative's bodyguard, set at 200 men by treaty, in Outer Mongolia. By December of 1918 the Chinese Government was proclaiming their intention of terminating the treaty between the Republic and Outer Mongolia. Negotiations were secretly begun between China and the Mongols, but support for the former was limited. Backed by 4,000 troops Cheng Li, the Chinese representative in Outer Mongolia, procured the promise of the Living Buddha to abolish the autonomous government. The draft was sent to Peking for approval. But in October of 1919 General Hsu Shu-tseng arrived in Urga with a stronger policy towards the Mongols. His demands were at first refused by the Mongols, but he exerted pressure until they complied. The President of the Chinese Republic issued a mandate on November 22nd 1919 which more or less restored the position of Outer Mongolia to that which it had been under the Manchus. The brief rule of General Hsu increased Chinese influence at the cost of Mongol hostility. General Hsu was followed by Li Yuan, and then Chang Yi returned to Outer Mongolia.

An attack into Outer Mongolia by a military adventurer, Baron Ungern Sternberg, in October of 1920 was repulsed, but the victorious Chinese commander Ch'u Ch'ih-hsiang permitted his troops to plunder and slaughter the foreign residents. Sternberg returned, spreading the idea of Mongol nationalism, taking Urga in February of 1921 and thereby abruptly ending Chinese rule in Outer Mongolia. The Living Buddha was forced to appeal unsuccessfully to Peking against the oppressive measures of Sternberg. And so, to all intents and purposes, Chinese direct control over Outer Mongolia came to an end.

The Mongols asked the Soviet Russians to help them against Sternberg and the latter was defeated. On November 5th 1921 a Russo-Mongolian Treaty was signed recognising Outer Mongolia as an independent state. On May 1st 1922 the Chinese Government lodged a complaint against this agreement. Unofficial discussions between the Soviet Union and China ended in March of 1924 with the signing of a treaty draft recognising Outer Mongolia as part of China; this was repudiated by the latter who demanded that Soviet troops be withdrawn from Outer Mongolia right away. However, in May of 1924 the Soviet Union formally recognised Chinese sovereignty over Outer Mongolia.

But a month after this latter agreement the Living Buddha died and Outer Mongolia declared herself the Mongolian People's Republic. This demonstrated the Mongols' preference for the Russians to the Chinese, not any particular partiality for Communism. China was torn by internal strife which broke out into civil war in 1926, and from 1927 her diplomatic relations with the Soviet Union were broken off.

Chinese colonisation had advanced through Inner Mongolia and stood poised to launch into the more fertile areas of Outer Mongolia. The Chinese expansion into Outer Mongolia never came as in 1931 and 1932 the Japanese army occupied Manchuria which was the Chinese base for colonisation operations against Mongolia. Direct postal communication between Outer Mongolia and China ceased to exist. The Japanese took advantage of the anti-Chinese feelings in Inner Mongolia to gain control of the Mongolian Political Council under Prince Teh. To counteract Prince Teh's influence the Chinese established in 1936 the Suiyuan Mongolian Political Council. But Sino-Mongolian hostility was too long established and a Mongol-Japanese army over-ran all but western Inner Mongolia.

China turned to the Soviet Union. In 1936 the U.S.S.R. and the Mongolian People's Republic had signed a Protocol of Mutual Assistance against which the Chinese had protested. The Chinese attitude was changed by the concluding of a pact of non-aggression between China and the Soviet Union in the autumn of 1937. Both Inner and Outer Mongolia meant a lot to China, but under the circumstances in which she found herself during the late 1930's she had to abandon all thoughts of re-establishing her authority in the north.

On April 13th 1941 the U.S.S.R. and Japan signed a treaty of neutrality in which it was agreed to respect the position of Manchukuo and the Mongolian People's Republic. From Chungking the Minister of Foreign Affairs Wang Chung-hui had stated that Outer Mongolia and Manchukuo were Chinese territory. In the same month of April the Soviet action was defended by the Chinese Communists.

Up to 1945 the Kuomintang under Chiang's leadership had confirmed on a number of occasions that they considered Outer Mongolia a part of China. But on January 5th 1946 the Chinese Nationalists gave official recognition to the Mongolian People's Republic. One of the prices Chiang Kai-shek had to pay for Soviet participation against Japan was to agree to the holding of a plebiscite in Outer Mongolia on October 20th 1945 to decide whether the state wished to be independent. Diplomatic relations between the Mongolian People's Republic and Nationalist China were established on February 13th 1946.

Soviet aid had been limited due to her own requirements, but after 1946 and the signing of a new 10 year mutual assistance pact the U.S.S.R. was able to increase its economic assistance to Ulan Bator. Ulan Bator

was linked by rail to the Trans-Siberian Railway. The first Five Year Plan was launched in Outer Mongolia in 1948, largely based on Soviet aid.

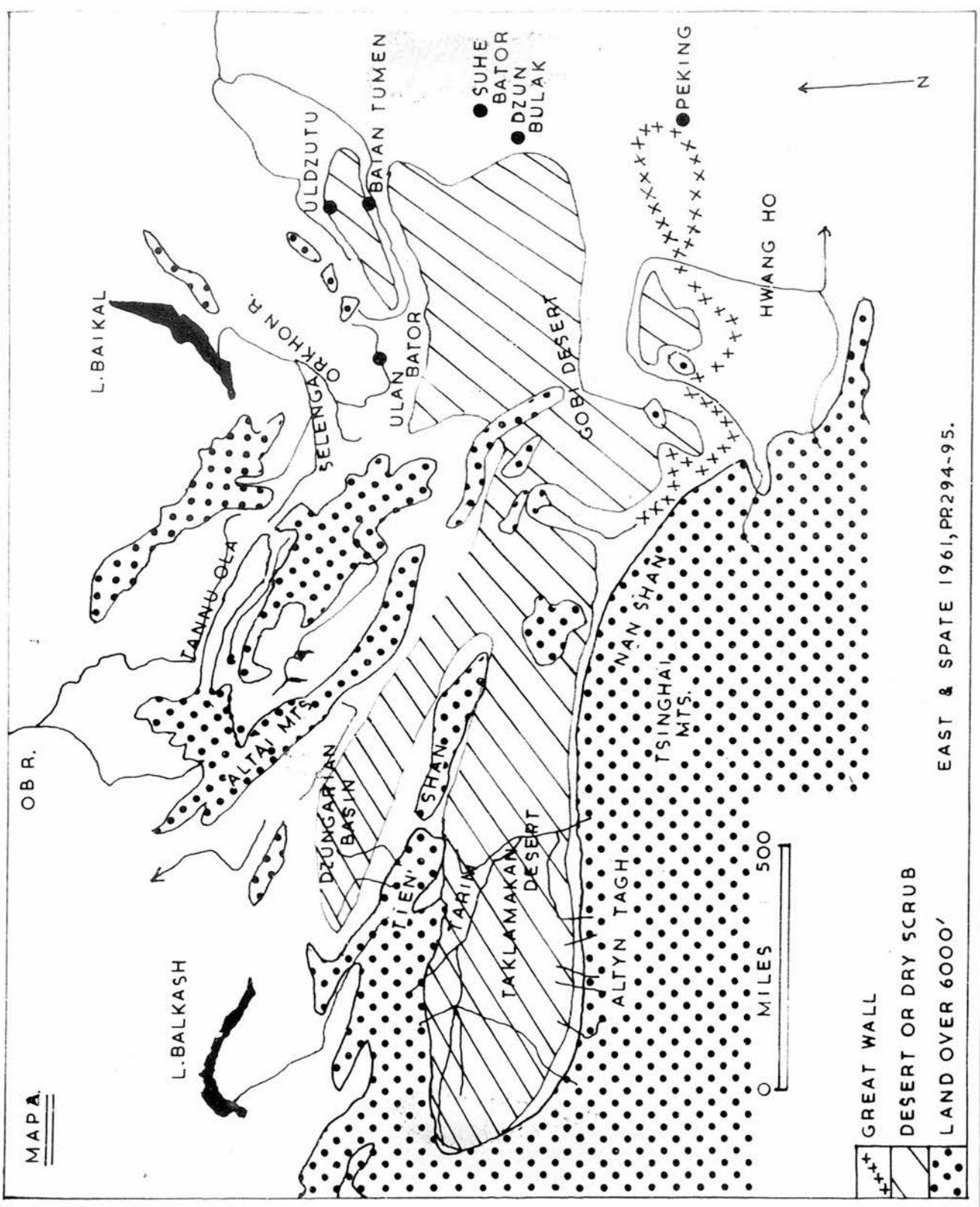
In October of 1949 the People's Republic of China was proclaimed. In 1950 the Peking Government recognised the Mongolian People's Republic, despite Mao's statement to Edgar Snow in 1936,⁵ 'When the People's Revolution has been victorious in China the Outer Mongolian Republic will automatically become part of the Chinese federation, at their own will.' A 10 year treaty of economic co-operation between Mongolia and China was signed in 1952, greatly aiding Ulan Bator's second Five Year Plan which was commenced in 1953. In 1955 Ulan Bator was linked with the Chinese railway network.

Perhaps as late as 1955 Soviet influence within the Mongolian People's Republic was unchallenged. It is still completely dominant as witness Ulan Bator's participation on Moscow's side in the Sino-Soviet ideological clash. But China since 1949 has attempted to remove her traditional image of aggressive coloniser of Mongol lands. Within Outer Mongolia the Chinese appear to be trying to outdo the Soviet Union, whether by building the most impressive embassy in Ulan Bator or in the granting of aid.

A change of attitude on the part of the Chinese towards the Mongolian People's Republic has also been signaled by the discussion of the Sino-Mongol boundary delimitation. Whether the agreement signed between Ulan Bator and Peking on December 26th 1962 includes a boundary delimitation, or merely provides a basis for discussion, remains to be seen. What is of importance is the willingness of the Chinese for the first time to recognise there is a political boundary between China and Outer Mongolia. The vast

5. Edgar Snow: 'Scorched Earth'; London 1941, p.289.

areas of disputed land along the Sino-Mongolian boundary (Map I) are the result of the Chinese and Mongols never having discussed before a delimitation. The Mongol line shown in Map I is taken from the boundary delimitation on Mongolian and Soviet maps, whilst the Chinese line is that favoured by maps published in China. Except for the differences between the Mongol pastoral economy and the irrigated agricultural economy of the Chinese there has been no boundary evolution of the type seen along most of China's other borderlands. There has been a careful delimitation of the Mongol-Soviet boundary in the north, culminating in Moscow's annexation of Tannu-Tuva in 1944, but no such history of development is to be found concerning the Sino-Mongol boundary.



CHAPTER TWO : Physical Characteristics of the Land

The Mongolian People's Republic extends 1,470 miles from east to west and 780 miles from north to south. It runs from 52 degrees 15 minutes North to 41 degrees 32 minutes North, and from 87 degrees 47 minutes East to 119 degrees 54 minutes, East. It has a total boundary length of about 4,400 miles of which 39% is shared with the Soviet Union and 61% with the People's Republic of China.

Basically Outer Mongolia is a dry plateau which rises from about 4,000 feet in the southeast to 5,500 feet in the central area (Map A). The southern part of the country is occupied by the Gobi Desert which extends into the Inner Mongolian Autonomous Region of China; this is a flat and monotonous wasteland, except for such hills as the Gurvan Shaik and the Khurkhe Ula in the South Gobi. Towards the north and west mountains such as the Khangai and the Mongolian Altai rise above the level of the plateau, the Altai Mountains reaching heights of 15,000 feet. The Altai Mountains extend into the U.S.S.R. and the Sinkiang-Uighur Autonomous Region of China. They are much faulted and deeply dissected and within the Altai rises the River Ob. The 1944 Soviet incorporation of the Tannu-Tuva upland basin within its own area means that the Russo-Mongolian boundary is now south of the Tannu Ola Mountains. East of Tannu-Tuva the Mongol-Soviet boundary stretches across the continuation of a deeply dissected plateau known here as the Eastern Sayan Range. Next comes the largest freshwater lake in Mongolia known as Khubsugol Nur and it is to the

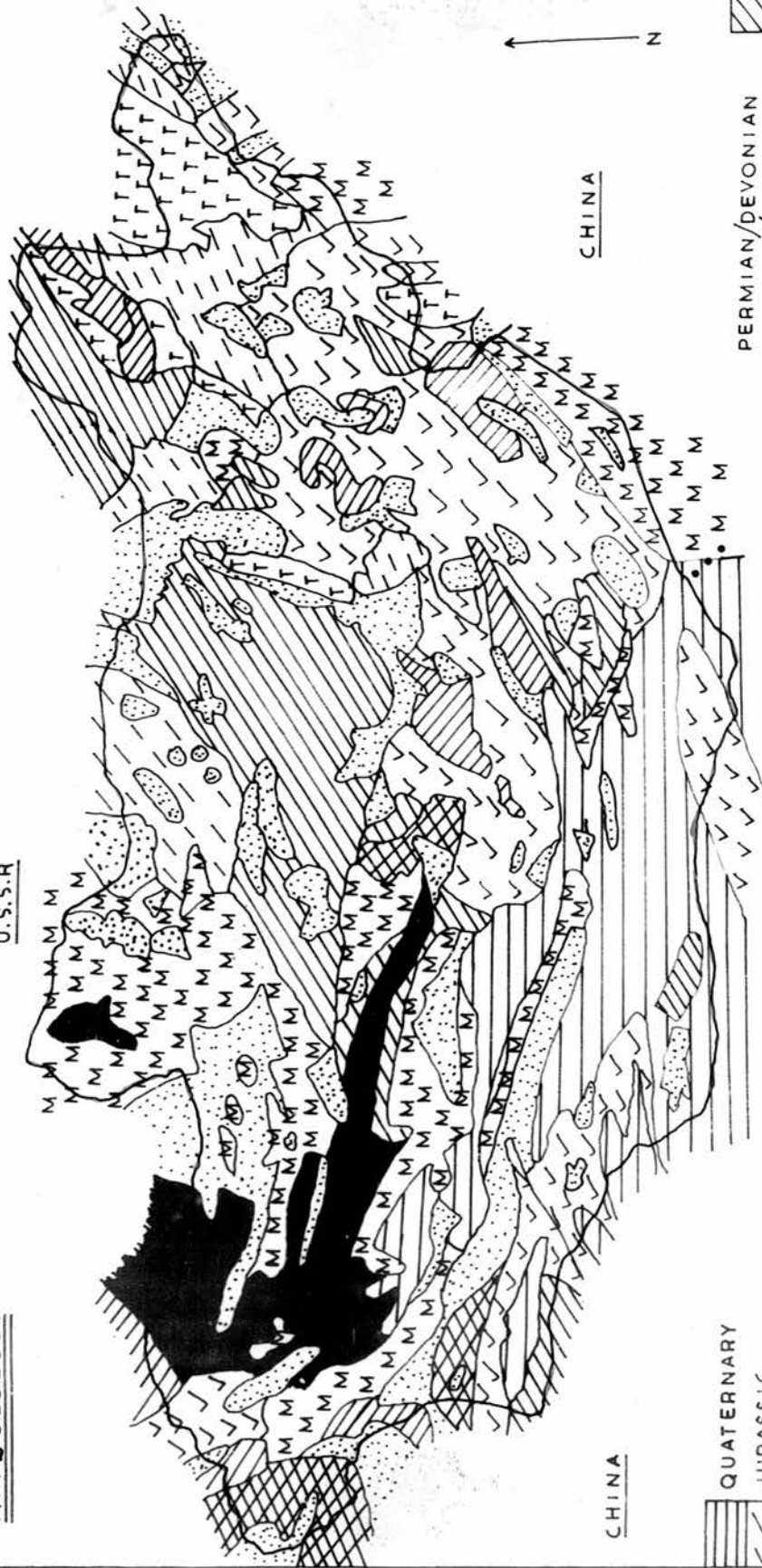
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1. In the chapter on the physical characteristics of the Mongolian People's Republic the following references have been of significance: C.P. Berkeley & F.K. Morris: 'The Geology of Mongolia'; American Museum of Natural History Publications, New York 1927; G.W. Hemy: 'Mongolia', Joseph Crossfield, Warrington 1963; W.A.D. Jackson: 'Russo-Chinese Borderlands', Van Nostrand, Princeton 1962; I. Prejevalsky: 'Mongolia, the Tangut Country, & the Solitude of Northern Tibet', Vols. I & II., London 1876; & E. Thiel: 'The Soviet Far East', Praeger, New York 1957.

north of this that the Russo-Mongolian boundary runs, passing across a broad highland valley which is the main routeway between Irkutsk in eastern Siberia and the Mongolian People's Republic. After this there is the Dzhedinsk Mountains stretching to the Selenga River and the Russo-Mongolian boundary uses a crestline in this range for its delimitation. The Selenga River, which is the major one in Outer Mongolia, drains northwards into Lake Baikal and provides a routeway between Mongolia and the U.S.S.R. The Trans-Siberian Railway is connected with Ulan Bator along the Selenga Valley. East of the Selenga River are a number of low ranges which the Russo-Mongolian boundary crosses, but after the Onon River the mountains give way to an undulating plateau which typifies the country in which the Russo-Sino-Mongol boundaries meet.

It is difficult to describe the Sino-Mongolian boundary with similar precision as the 1962 border agreement between the Mongolian People's Republic and the People's Republic of China has not been published as yet. However, the landscape along the 2,700 mile boundary is a much less complex one than the Russo-Mongolian one in the north. According to Mongol maps published by the Soviet Union the Sino-Mongolian boundary starts in the west by running southeastwards along the crestline of the Altai Mountains (Map A). After leaving the mountains the boundary has a somewhat arbitrary route across the Gobi Desert, the delimitation of which has a certain variety on Soviet, Chinese and Mongol maps, as it has also in the eastern plateau region. The Chinese have, amongst other things, tended to incorporate the Mongol Altai Mountains within Sinkiang in order to control the local streams and the dependent oases to the west. The Chinese have favoured a number of more northerly crestlines.

MAP 8. GEOLOGY

U.S.S.R.



CHINA

CHINA

QUATERNARY
JURASSIC
METAMORPHIC ROCKS
IGNEOUS INTRUSIONS
AEOLITHIC SANDS

PERMIAN/DEVONIAN
TERTIARY/UPPER
CRETACEOUS
CRETACEOUS
TERTIARY
SILURIAN

BASED ON F.K. MORRIS & C.P. BERKELEY 1927.

0 150 MILES

0

Whether the Sino-Mongolian boundary has actually been delimited in the agreement of December 1962 cannot be stated. The length taken to publish details of the treaty contrasts to the prompt reporting in official journals such as the 'Peking Review' which followed the Sino-Burmese, Sino-Nepalese and Sino-Pakistani boundary delimitations. This suggests that the initial agreement is probably merely a basis for further discussion before a complete boundary delimitation is settled. One of the main problems is that the Sino-Mongolian boundary has never before been delimited by treaty and so there is no easy basis from which to negotiate.

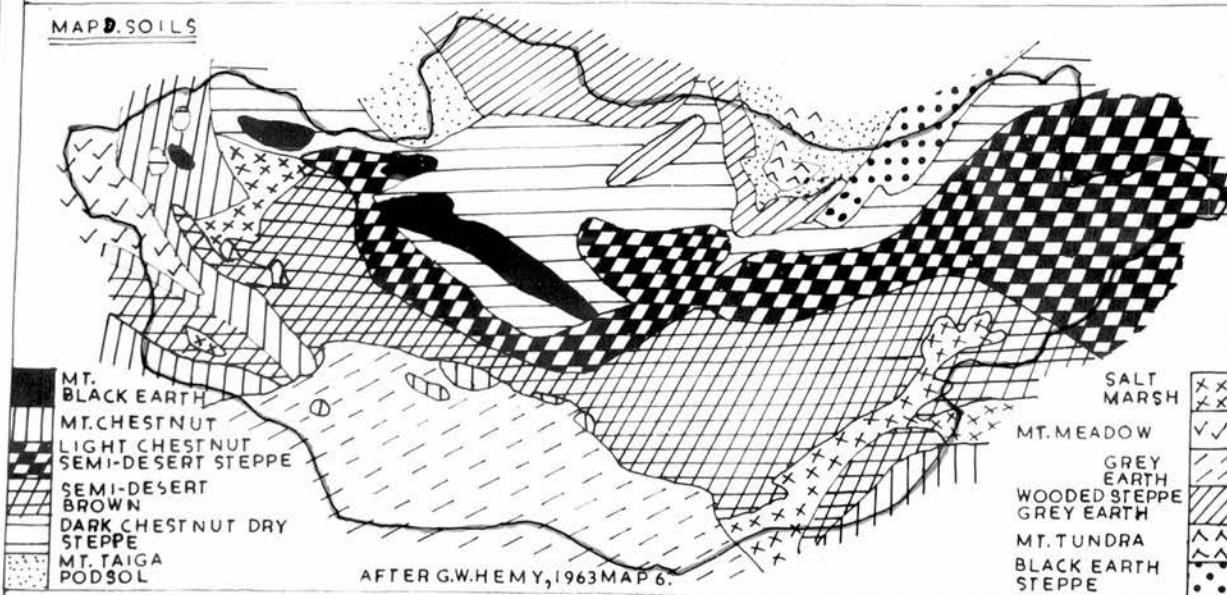
The Mongolian People's Republic is therefore mountainous in the north and west. In the south is the Gobi Desert which stretches eastwards to become the Taklamakan Desert of the Tarim area of Sinkiang and the Dzungarian Basin further north of this. Eastern Outer Mongolia is an undulating plateau extending into the Soviet Union and China.

As Map 8 demonstrates the geological make-up of the Mongolian area is complex. Beginning in the western portion of the country the Altai Mountains are composed of Silurian, Tertiary and Upper Cretaceous rocks with igneous intrusions and partly metamorphosed. The lower area of Ubsu Nur further north is also metamorphic rocks with igneous intrusions. Similarly the more northerly mountains are metamorphic and Silurian with igneous intrusions. The Selenga River basin flows mainly on Permian and Devonian with some areas of Jurassic strata. East of the Selenga River system there are hills of Jurassic rock and igneous intrusions which give place to the plateau lands which are composed of Tertiary, Upper Cretaceous, Jurassic, Permian and Devonian rocks with igneous intrusions. The Gobi Desert is underlain with Tertiary, Upper Cretaceous and Quarternary strata, with patches of Permian, Devonian and metamorphic rocks. Igneous

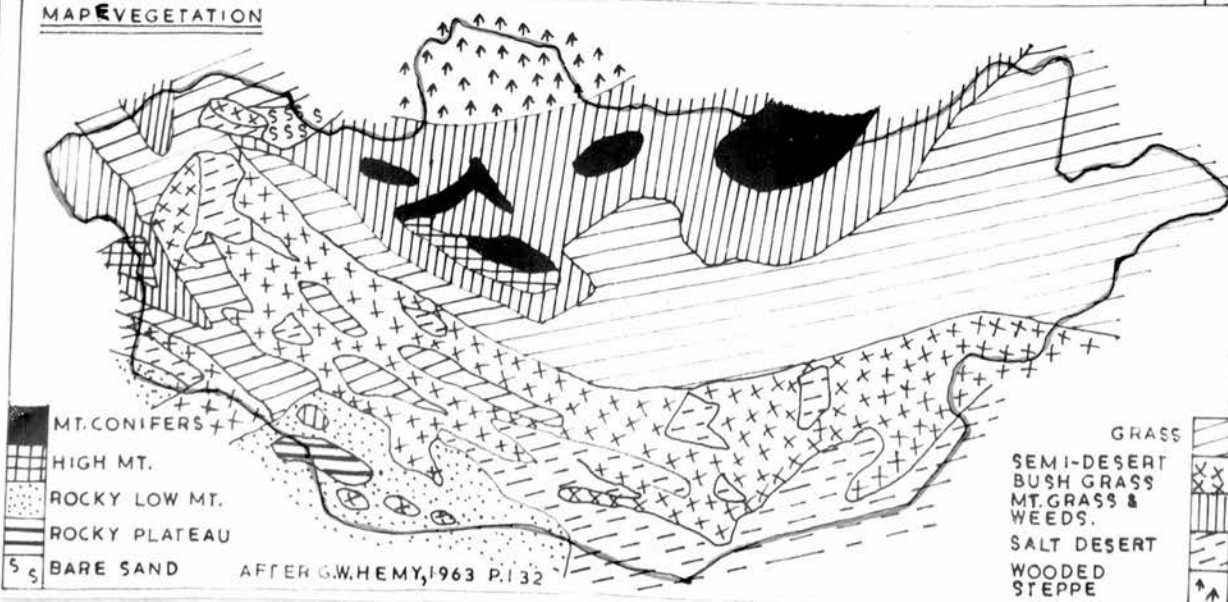
MAP C. ANNUAL PRECIPITATION



MAP D. SOILS



MAP E. VEGETATION



intrusions are frequent throughout the area of the Mongolian People's Republic.

The climate of the Mongolian People's Republic is extreme continental with a great variation in daily, seasonal, and yearly temperatures and rainfall. The summer maximum reaches over 90 degrees F., whilst the winter minimum falls as low as -50 degrees F. Diurnal variations have been known to exceed 60 degrees F. Within the state temperature varies little with location, but altitude influences it more. However, although the differences throughout the year may be dramatic, those from place to place are not startling. Muren (Map C) in the north has an average annual temperature which ranges between 25 and 30 degrees F., with an absolute maximum of 92 degrees F., and an absolute minimum of -56 degrees F. Dalan Dzadagad in the southern Gobi Desert at a lower elevation has an annual average temperature ranging between 36 and 40 degrees F., and an absolute maximum of 98 degrees F., and an absolute minimum of -33 degrees F.

In winter an area of intense high pressure forms over northern Mongolia caused mainly by the cooling of the land surface in the continental interior. Cold, dry air masses form which are cut off from movement south by high mountains and so flow southwest into Central Asia. Winter winds in Mongolia are slight and local. In summer and autumn Outer Mongolia is an area of low pressure and sustained winds from the west bring rain. 70-80% of the total precipitation falls in the summer months of July and August. Rainfall everywhere in Outer Mongolia is small (Map C), but varies from area to area. During the years from 1955 to 1960 Muren did not fare as well as normal with a maximum of a little over 10 inches in 1960 and a minimum of about 6 inches in 1957. Dalan Dzadagad did well in 1955

with over 9 inches of rainfall, but fell to about 3 inches in 1957. As can be seen there is a yearly fluctuation in rainfall. In most areas of the Mongolian People's Republic these annual differences are critical. A good year such as 1959 was throughout the country means excellent harvests, but poor years like 1957 are serious for an economy based on pastoralism and agriculture.

With regard to climate and the Sino-Mongolian boundary it has been suggested that there is a division between the Mongolian People's Republic and China's Inner Mongolian Autonomous Region. In Inner Mongolia slightly more moist conditions than prevail in and north of the Gobi have made dry farming more successful. Chinese immigrants have settled with some success in Inner Mongolia so that they now greatly outnumber the Mongols there which tends to support this hypothesis of a climatic divide. However, the division is an arbitrary one and leads a geographer to wonder if, had the Mongolian People's Republic failed to come into being with Soviet backing, the Chinese advance aided by the railways might have ignored the general area and continued some distance northwards; after all, in a good year the southern Gobi gets almost 10 inches of rainfall.

As the soil forming processes take place in a continental climatic regime they are characterised by a desert type which is coarse grained and low in organic matter. Grey and chestnut soils predominate in areas with a rainfall up to about 8 inches per year. Salt marsh soils are comparatively common with up to 15% of their content carbonates, sulphate and chloride salts.

Map D illustrates the variety of soils, within the Mongolian People's Republic. This variety is closely associated with climate and vegetation,

and has led to certain types of agriculture which will be dealt with later in this study. The correlation between such elements of climate as rainfall, and soils, and vegetation is well brought out by a comparison of distributions shown in Maps C, D, and E.

Vegetation has the advantage of giving the clearer picture of how physical geography characteristics can affect political geography, the impact of soils geography is less obvious. How does a state such as the Mongolian People's Republic integrate successfully into the political unit an area of salt desert such as that existing along much of the Sino-Mongolian boundary, there is no economic development, nor population concentration to make it economically feasible to build a comprehensive road network within the area? Perhaps a deterioration in Sino-Mongol relations would warrant the imposition of the state administration right up to the boundary. It is economically easier to integrate politically an area such as the grasslands shown in the east in Map E. The Ulan Bator administration is most effective in those areas of higher rainfall, richer soil, and economically important vegetation (e.g. pasture or trees). But should Sino-Mongolian relations deteriorate political considerations will outweigh economic and there will be greater Mongol political activity in the areas of salt marsh soil, bare sand and salt desert.

Historically the Chinese culture and economy was based upon conditions which enabled the practice of irrigated farming, whilst the Mongols were pastoral nomads. The frontier zone between the Mongols and Chinese could be used by farmers, but was less favourable to Chinese techniques than the wetter areas further south and was too far from the areas of high population density to permit the transport of the agricultural surplus to the markets of China. If the Chinese chanced farming this zone the bullocks

drawing a cart of grain would have consumed all the load before the main markets of China could be reached. There was no pasture in China to feed travelling bullocks as every acre of suitable land was farmed. Chinese farming the frontier could only transport their grain surplus into Mongol territories where pasture was the norm and therefore distance only a minor problem. Therefore the Chinese could only farm the frontier if they meant to trade with the Mongol chieftains, and if the latter wished to encourage them to do so.

The coming of the railways defeated the problem of transport of surplus to the main markets of China for farmers on the frontier. Nevertheless much of Outer Mongolia is not suited to cultivation because of such considerations of physical geography as climate, soil and relief, and is best left to stock raising. There is thus a broad frontier between what is now the Mongolian People's Republic and the Chinese People's Republic which divides the two differing ways of life largely the result of differing physical environments. The Sino-Mongolian boundary, if and when it is delimited and demarcated, will be partly assisted in its function as a division by the physical geography of the border area. The boundary will not mark a precise divide in the physical geography as the differences between the Mongolian and Chinese environments are not abrupt; northern Inner Mongolia supports a pastoral economy still despite Chinese efforts to introduce dry farming, whilst Outer Mongolia possesses cultivated areas. There is a frontier zone which is the outcome of a number of factors, perhaps the most important being the physical geography.

CHAPTER THREE : Cultural Characteristics

According to the Census of 1956 the Mongolian People's Republic had a total population of 845,500 of which 420,300 were male and 425,200 were female. This means that Outer Mongolia has a population of about one person per square mile which contrasts with much of China to the south. The Mongolians estimated their population in 1960 to be 936,900 which is still a very small one by Asian standards. According to official estimates in 1918 Outer Mongolia had a population of 647,500 which had risen to 738,200 by the time of the first Census in the Mongolian People's Republic held in 1935. The Census of 1944 gave 759,200 as the population of Outer Mongolia at that time. Efforts are being made to encourage the birth rate in the country as there is a chronic labour shortage; in fact over 10,000 Chinese have been brought into the state on 5 year contracts and, although they tend to be segregated from the Mongol communities in contrast to the freedom of movement afforded to the Russians, at the end of their time the Chinese can take out Mongolian citizenship if they so desire. The birth rate has risen, for example it was 32.3 per thousand in 1955 and 43.2 per thousand in 1960. The death rate in 1955 was 11.8 per thousand of population and 10 per thousand in 1960. Births totalled 26,900 in 1955 and 41,200 in 1960.

The greatest concentration of population in the Mongolian People's Republic is the capital of Ulan Bator with a 1960 total of 164,000. Acc-

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1. The following have been of particular importance in this chapter: D.Bodde: 'China's Cultural Tradition'; Rinehart, New York 1956; W.A.D.Jackson: 'The Russo-Chinese Borderlands', Van Nostrand, Princeton 1962; O.Lattimore: 'Mongol Journeys', Jonathan Cape, London 1941; 'Nationalism & Revolution in Mongolia', Oxford University Press, New York 1955; 'Nomads & Commissars', Oxford University Press 1962; & 'Studies in Frontier History', Mouton, Paris 1962.

ording to the 1956 Census report of this population 75.6% of the total claimed to be Khlaka Mongols (639,100). The southern Mongols accounted for 119,300 and to these can be added the Buryats who make up 2.9% of Outer Mongolia's population. There is, therefore, an overwhelming predominance of Mongols within the Mongolian People's Republic. The Mongols extend in their distribution into Inner Mongolia. Throughout the Mongol tribes of Outer Mongolia there is a strong Mongol nationalism. However, within the Mongolian People's Republic there are minority groups adding discord. The largest minority group are the Turkic speaking Kazakhs located in the southeast corner of the state and extending into the Sinkiang-Uighur Autonomous Region of China. In 1956 the Kazakhs within Outer Mongolia numbered 36,700, or 4.3% of the total population. There were also 13,400 Russians, some experts of temporary residence, but many settled along the Mongol-Soviet boundary area. There were more Chinese than Russians, numbering 16,200 in 1956 (1.9% of the population). The Chinese were mainly labourers under contract or technicians, although there were some Chinese farmers along the southern boundary. The rest of the population is made up of a diversity of nationalities ranging from the few Uighurs in the southeast to the various embassy staffs in Ulan Bator and the technicians from Eastern Europe.

The Mongolian People's Republic has discouraged religious beliefs amongst its citizens as befits a Communist country. Before the advent of Communism as has been seen (Chapter One) amongst the Mongols Lamaism was all powerful, but since the success of the administration in gaining the independent status of Outer Mongolia it has been on the wane. Lamaism is nominally a Buddhist belief, but includes influences from Nestorian

Christianity and Manichaeism. It is still adhered to by many of the older Mongols, but is similar in status and appeal to the Russian Orthodox Church in the U.S.S.R. The Kazakhs are nominally Moslems, but their conversion to Islam has never been fully effective.

As might be expected Mongol physical characteristics decline with a move westwards. The Turkic peoples such as the Uighurs and Kazakhs illustrate well this point. They are a 'racial' mixture and include a good amount of Alpine stock which becomes more noticeable the more westerly the position. Within the Mongolian People's Republic the physical differences between the Mongols and Kazakhs are small.

Like the Mongols the Turkic minorities within Outer Mongolia have traditionally had a pastoral economy. This leads to a greater sympathy between the two groups than between a pastoral people such as the Kazakhs and farmers like the Han Chinese. However, it would be incorrect to state that the Mongolian People's Republic has no minority problem, it is more a case of the problem being less pressing than within China. Allegiance to the state amongst the Kazakhs and Uighurs still takes second place to the tribal group.

There is not such a gulf between the Mongols and Kazakhs in language as there is between the Mongols and Chinese. Chinese is a member of the Sino-Thai family of languages which includes many of the Indochinese group. The Turkic and Mongol languages belong to the same family of Ural-Altaic speech. Lattimore suggests that the Ural Altaic languages spread from the northern forest areas into the steppelands and steppe oases. Steppe life became identified with the Ural Altaic languages so that when there was a retreat of Sino-Thai speakers into the steppe they were con-

2. O.Lattimore: 'Inner Asian Frontiers of China'; Beacon edition, Boston 1962, pp.456-459.

verted to the former languages (e.g. the Mongols). Similarly, the Sino-Thai languages became associated with the sort of sedentary life favoured by the Chinese and the agricultural mentality moulded the speech. There is no physical difference of importance between the Mongols and Chinese, but the differences in speech and economy have produced a cultural gulf which over-rides all other factors in their relationship.

Although a Mongol can learn more easily the language of the Kazakh or Uighur than that of the Chinese the fact that the Mongolian People's Republic contains a sizeable minority speaking an alien tongue does lead to disunity within the state. The Kazakh and Uighur minority feels sympathy with those Turkic peoples within China and the U.S.S.R., but perhaps not to the same degree as the Mongols of Inner Mongolia, outnumbered five to one by Chinese immigrants, look towards the Mongolian People's Republic.

Both China and Outer Mongolia have endeavoured to curb the nomadic life of their citizens, but the Sino-Mongol boundary is not enforced with any rigidity; the effort to settle the nomads in Mongolia has been aimed at improving the productivity of the herds and the grazing land. It has been a change from nomadism to ranching and the resulting increase in productivity has apparently made the transition acceptable to both the Mongols and the minority groups. Differences in religious belief in this economically progressing secular state are hardly worthy of a mention. Impressive improvements in the standard of living and the advent of universal education is leading to the break down of cultural differences. Although the Mongols are nationalistic they are not so in the aggressively superior way of the Chinese. There is a cleavage between the Mongols and the Chinese in their mutual 'frontier' (rather than 'boundary') zone which is not so clearly marked between the Mongol and Turkic peoples within the Mongolian People's Republic.

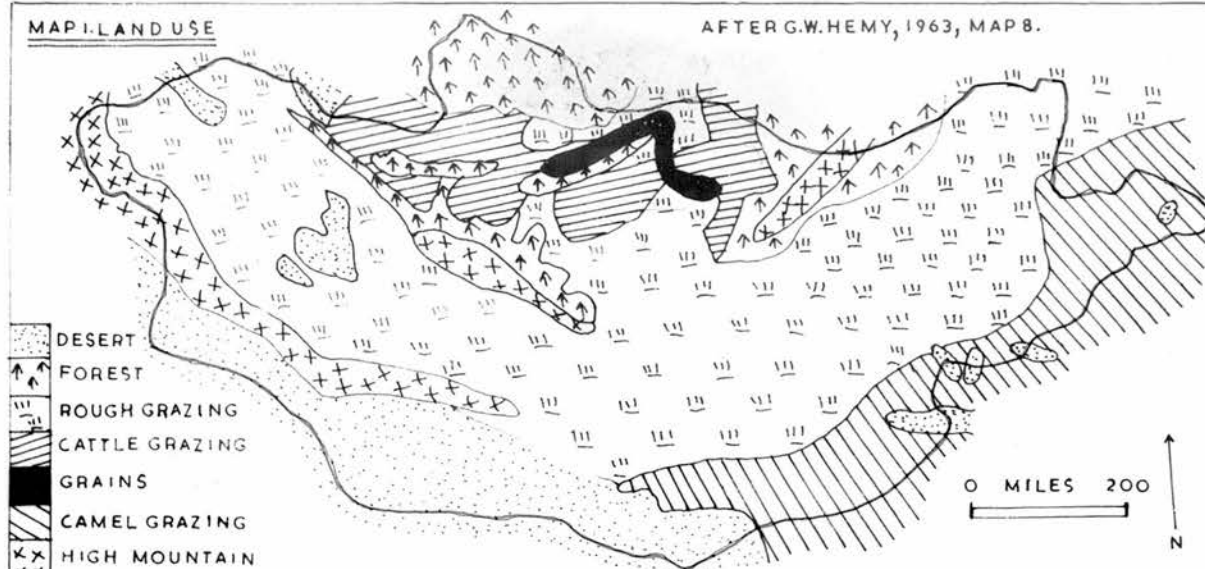
CHAPTER FOUR : The EconomyAgriculture & Forestry

Unlike China Outer Mongolia has followed a policy of putting as much investment into agriculture as into industry. The Mongolian People's Republic launched her first Five Year Plan in 1948. This was followed in 1952 by a second Five Year Plan, and then in 1958 a Three Year Plan. At present the Mongolian economy is being reshaped by the Third Five Year Plan (1961-1965) under which it is hoped agricultural production will increase by 80% and industrial by 110%. In 1960 Outer Mongolia invested 98.4 million tugriks (there are 11.2 tugriks to £1) in agriculture of which 0.4 was for repair and reconstruction work, and 113.7 million tugriks on industry of which 18.8 million tugriks was for repair and reconstruction. New construction in agriculture was therefore 98 million tugriks and in industry 95 million tugriks which is a pattern which has prevailed in all the Mongolian development years, for example in 1959 new construction in industry was 61.6 million tugriks and for agriculture was 66 million tugriks. The total capital investment by the Mongolian People's Republic, and excluding aid from other countries, continues to increase considerably; the First Five Year Plan saw the investment of 203.7 million tugriks, the Second 598.7 million tugriks, the Three Year Plan 961.1 million tugriks and

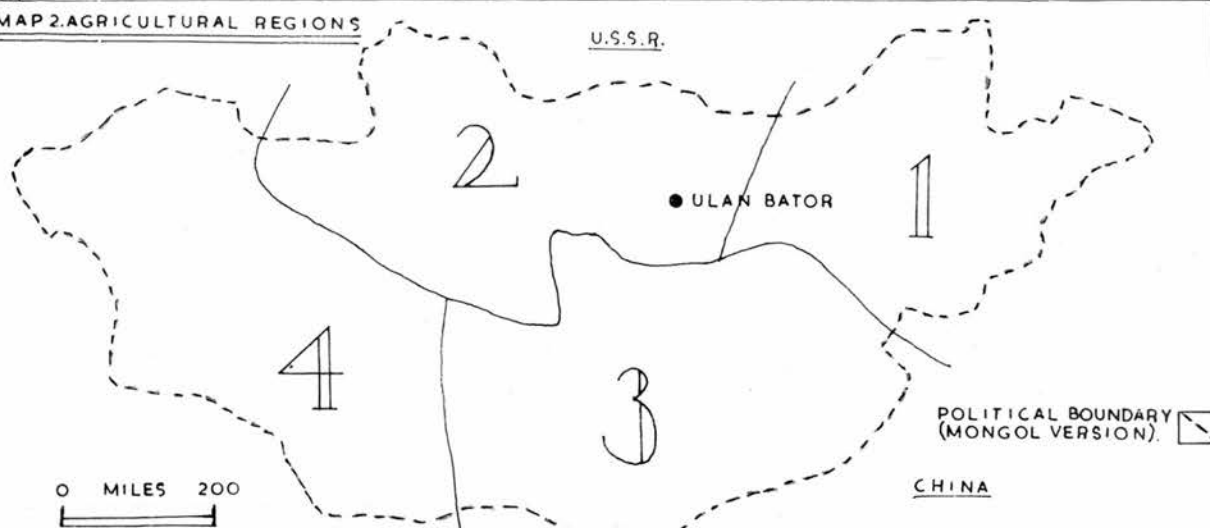
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1. Throughout this section on the Mongolian People's Republic statistical material has come mainly from 'The National Economy of the People's Republic for 40 years' which was published (in English) in Ulan Bator in 1961. Also important in this chapter have been Berkeley & Morris: 'The Geology of Mongolia', American Museum of Natural History Publications, New York 1927; G.W.Hemy: 'Mongolia, An Economic Handbook', Joseph Crosfield, Warrington 1963; & H.Wiens: 'Geographical Limitations to Food Production in the Mongolian People's Republic', Annals of Assoc. of Amer. Geogs. Vol. 41, for 1951.

MAP 1. LAND USE

AFTER G.W. HEMY, 1963, MAP 8.

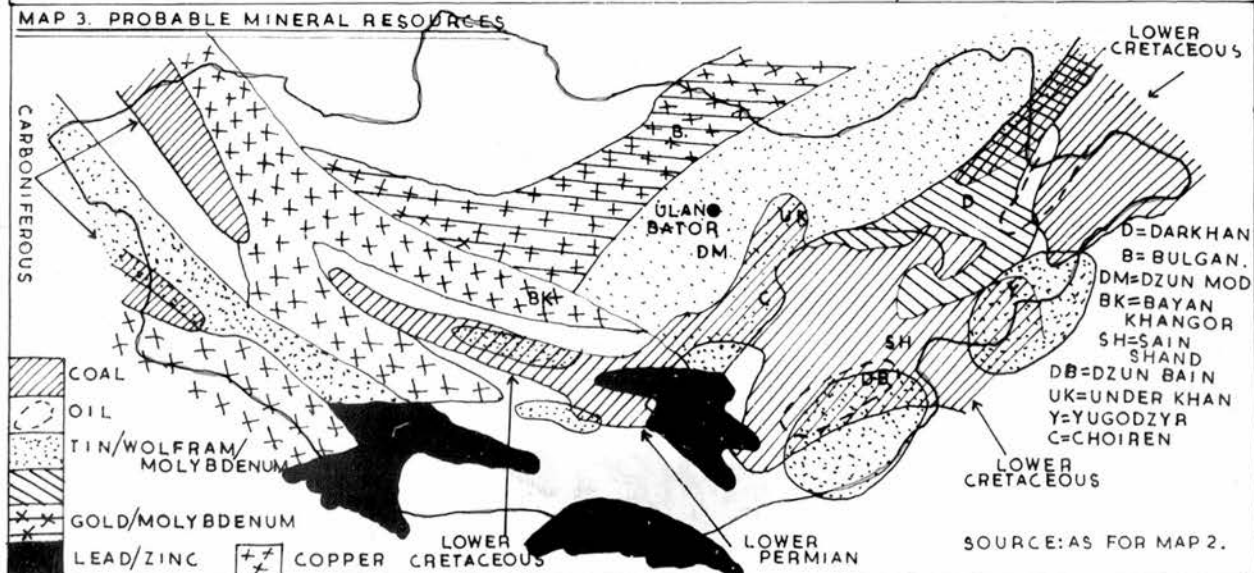


MAP 2. AGRICULTURAL REGIONS



BASED ON: "NAT. ECON. OF PEOPLE'S REP. FOR 40 YEARS", ULAN BATOR, 1961.

MAP 3. PROBABLE MINERAL RESOURCES



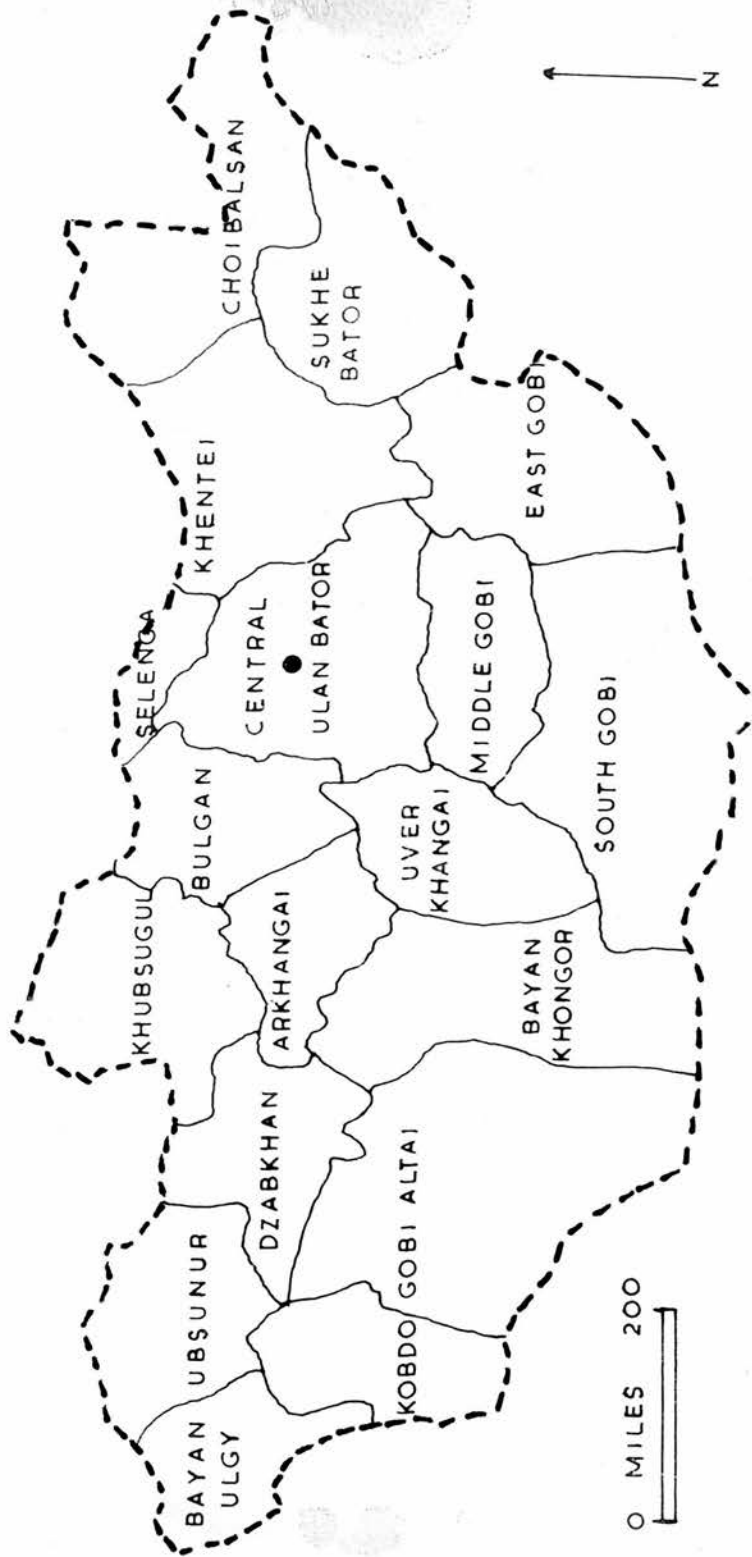
in 1961 of the Third Five Year Plan 643.8 million tugriks was spent. The Mongolian People's Republic has also been receiving the highest per capita foreign aid in the Communist bloc; between 1957 and 1962 the Mongols received £166 per head of population which was double that granted to Albania which is the next largest beneficiary. Between 1957 and 1962 the Soviet Union offered Ulan Bator £125 million and China gave £41 million which is roughly seven times the aid (on a per capita basis) given by the two countries to Cuba.

In 1960 130,587,000 hectares, or 83.5% of the land area being used, was classified as 'pasture' (in Map I this includes rough grazing, camel grazing and most of the cattle grazing). 0.8% of the land used could be termed 'meadow' as it is 1,311,000 hectares of better watered pastureland. In 1960 there was only 415,000 hectares of arable or 0.3% of the total. 9.6% of the land in use (i.e. land which is in some way productive, this excludes high mountain and desert) was covered by forest (15,010,000 hectares).

The distribution of this land use is shown in Map I. There is desert and semi-desert camel grazing along the Sino-Mongol boundary and this continues into Inner Mongolia, Kansu and Sinkiang. The Altai and Khangai Mountains, plus an area further north, are too high to be productive. North of the Gobi Desert there is a modest improvement in rainfall which produces a rough grazing covering much of the Mongolian People's Republic and which is used for sheep. The northern part of the state has the better quality cattle grazing, plus the main forest areas and the only large region of arable farming to the northwest of Ulan Bator. Nowhere do the international boundaries mark a division in the land use, nor as yet has

MAP 4. ADMINISTRATIVE DIVISIONS

U.S.S.R.



ADMINISTRATIVE BOUNDARY
INTERNATIONAL BOUNDARY

CHINA

there been much serious attempt to change the pattern, although China has plans for turning Inner Mongolia into one of the great granaries of the People's Republic.

In Map 2 an attempt is made to generalise the agricultural picture in the Mongolian People's Republic by dividing the state and the adjoining areas into four regions. The first is the eastern steppelands in which have been placed much of the administrative areas of Choibalsan, Khentei and Sukhe Bator (Map 4A). This produces a third of Outer Mongolia's hay and is famed for horses and cattle. The second region has a variety of land uses, but might be called 'woodland and steppe'. It includes much of Selenga, Central, Bulgan, Arkhangai, Khubsugal and Dzabkhan. This region produces most of Outer Mongolia's grain, most of the milk production, over half the cattle and half the hay and is not unimportant for sheep. Region Three is that of the Gobi steppelands and includes most of East Gobi, Middle Gobi, Uver Khangai and Bayan Khongor. Here are 30% of Outer Mongolia's sheep, 60% of her camels and 15% of her cattle. There is no hay production and grain only in a very few areas where irrigation is possible. The mountain and steppe of the fourth region includes Bayan Ulgy, Kobdo, Ubsunur and Gobi Altai. The Gobi part of this region is one of the important sheep areas of Outer Mongolia and the most important goat herding area. Ubsunur is mainly an area of pastoralism producing horses and sheep. There is a certain amount of transhumance in summer to take advantage of the good pastures found up the mountain sides. The first region extends into the Soviet Union and China, the second into the U.S.S.R., the third into China and the fourth into the U.S.S.R. and China.

Agriculture has been modelled upon that of the Soviet Union. In 1940

there were 91 co-operatives which had risen to 727 in 1958, but after this the agricultural co-operatives were made into larger units so that whilst there were on an average 98 households to a co-operative in 1957 by 1960 there were 475 households (a total of 354 co-operatives). In 1940 there were 10 state farms, whilst in 1960 there were 25. In 1947 only 0.2% of all livestock was owned by the co-operatives, but by 1960 73.8% was. The influence of Chinese ideas of agricultural organisation is negligible in the Mongolian People's Republic, and Soviet methods are always those to which the Mongols adhere.

In 1957 livestock products accounted for 82.6% of the agricultural production (by value) and crops 17.4%. By 1959 there was an increase in the importance of crops so that they provided 20.2% and livestock 79.8%. Since then there have been some fluctuations, but the ratio of 80% livestock to 20% crops tends to predominate. The raising of livestock is the traditional mainstay of the economy of Outer Mongolia and it continues to predominate. It is best suited to the uncertain and extreme climate. The recent trend has been not to increase the numbers, but to improve the animals. In fact in a year of poor weather fodder is inadequate for the present numbers and water and shelter add to the problem. Wood is provided free to both private owners and the co-operatives so that shelter may be built for the livestock (the latest figure available is for 1957 when 30% of the livestock could be provided with shelter). Despite an ambitious programme for constructing wells there is still a shortage of water during a dry year. The state farms lead the efforts to improve the breed and in recent years it has been possible to introduce a sheep which is well adapted to the poor pasture of much of Outer Mongolia which will give up to 100% more medium staple wool than the local Mongolian sheep.

FIG. 1. LIVESTOCK

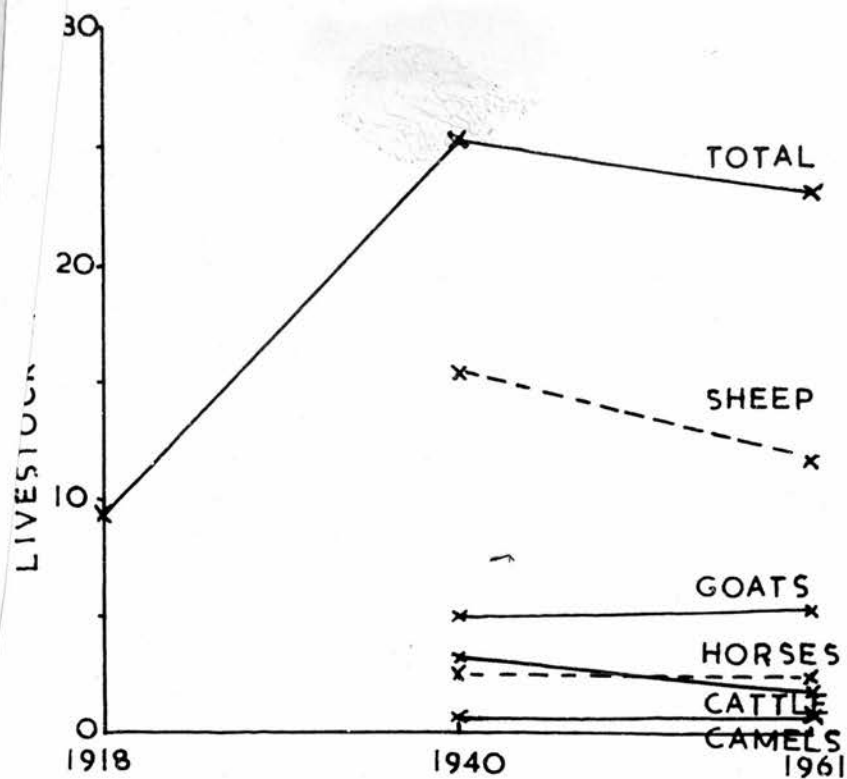
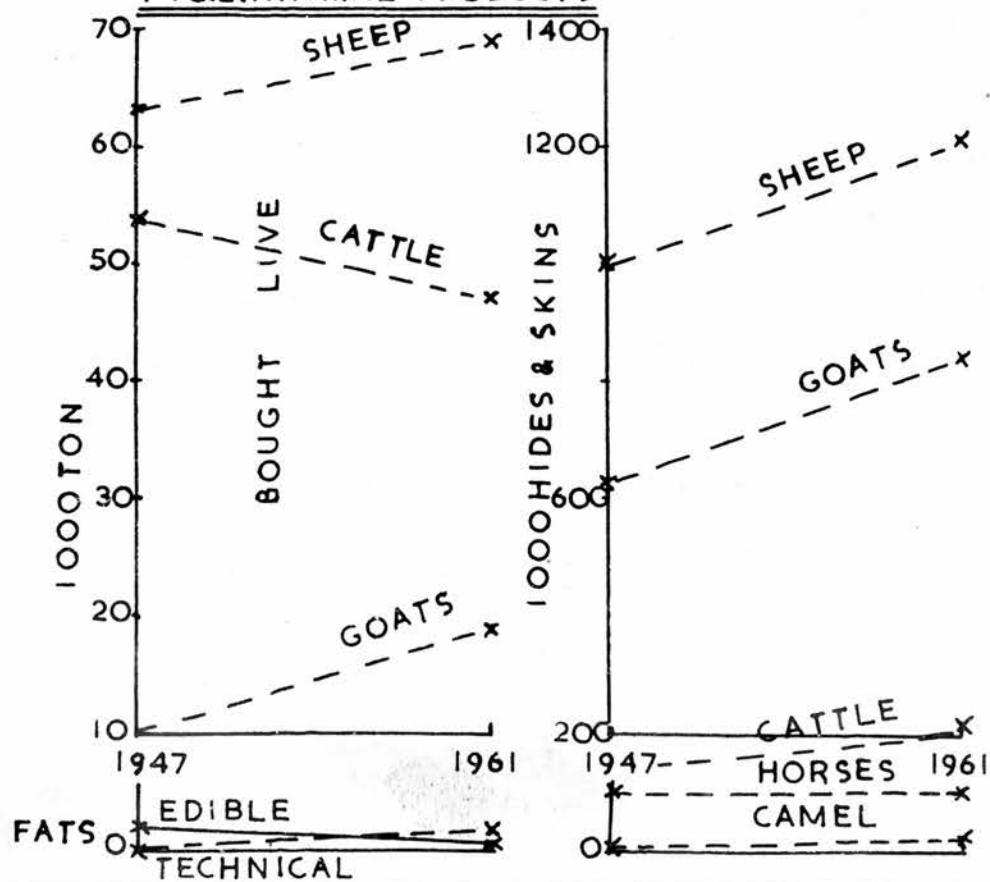


FIG. 2. ANIMAL PRODUCTS



State policy has been directed towards the encouragement of livestock production with regular increases in the procurement prices and the organising of the majority of private breeders into co-operatives in order to make economic use of veterinary care, fodder, water and marketing facilities.

Between 1959 and 1961 weather conditions were the worst they had been for a number of years. Veterinary staff during this period proved insufficient in numbers, winter pastures were deeply covered with snow, and the summers were exceptionally dry. In 1961 autumn floods destroyed most of the hay and much of the other feed on a scale worse than ever recorded before. During these two years livestock losses totalled about 3.5 million, the most sorely hit areas being Gobi Altai, Bayan Khongor, South Gobi and Kobdo (Map4A). Although this set back hindered Outer Mongolia's development plans the years since have been a little above average.

As Figure I demonstrates there have been changes in the make-up of Outer Mongolia's livestock over the years. The increase in the number of goats and camels is due to their ability to live off rough pasture. Improvement in stock has led to decreasing numbers of cattle and sheep. The number of horses has remained about the same, although with increasing mechanisation a decline can be expected. Although pigs and poultry are of less importance in the economy at present their numbers are increasing rapidly, notably on the state farms which are the spearhead of progress in the agriculture of the Mongolian People's Republic.

The Government buys all livestock products for sale within the state. Figure 2 illustrates the changes in production between 1947 and 1961. Livestock farming within the People's Republic is booming due to the ever

increasing needs of the U.S.S.R. which takes on average 70% of all Mongolia's exports. In 1960 88.6% of Outer Mongolia's total exports were livestock products.

The Mongolian climate is not generally suited to the growing of grain and vegetables, but since 1957 great effort has been put into increasing the area of production. Between 1957 and 1960 the sown area under grain was trebled and that under silage and fodder crops quadrupled. The vegetable and potato area did not change much. The increase in area was mainly on the state farms and appears to be connected with the Soviet Union's efforts to produce more. To begin with the Mongols were lucky as the weather was favourable and grain production by 1960 increased five times and fodder crops by over two times. There was then a set-back with the weather and despite an enormous increase in acreage sown the 1961 grain harvest was only 50% better than that of 1957 and for hay only about 65% better. In 1960 7% of Outer Mongolia's exports had been grain but in 1961 she had to import grain. This brings home the basic unsuitability of most of the Mongolian People's Republic for the cultivation of crops other than on a gambler's basis.

In 1941 the total area under crops was 26,600 hectares. This had increased to 83,200 hectares in 1957 and 382,200 hectares in 1961 (the comparison of the 1957 and 1961 figures shows the later failure of the expansion when the area was increased over fourfold and the total crop by only 50% in most cases). In 1941 25,300 hectares of the total was grain and 1,300 hectares vegetables and potatoes. Of the 1957 total 75,700 hectares was grain and 3,300 hectares vegetables and potatoes, the rest being fodder crops. Of the 1961 total 334,700 hectares was under grain crops.

Throughout grain has predominated, although recently the Mongols have been receiving Chinese aid to increase their vegetable and potato farming, one of the notable examples being a large truck farm constructed by the Chinese on the outskirts of Ulan Bator with a storage capacity for 2,000 tons of vegetables.

Not only has the area under crops been increasing, but the mechanisation of agriculture has been taking place at a much higher rate than in the People's Republic of China. China suffers from an excess of population whilst the Mongolian People's Republic is desperately short of agricultural labour. In 1948 Outer Mongolia had 165 tractors, but by 1960 this figure had risen to 3,211 tractors. Ploughing, sowing, harvesting and hay-making are now fully mechanised.

The agriculture of the Mongolian People's Republic is wedded to the economy of the Soviet Union. In 1960 Outer Mongolia's exports were worth £144,800,000 of which the U.S.S.R. took £109,900,000 worth and China a mere £6,550,000. All of the Soviet Union's imports from Mongolia were in the form of agricultural produce. The U.S.S.R.'s agriculture has failed to keep up with her increases in population and industrial production, so the Mongolian People's Republic supplements the Soviet economy with its surplus. If anything the trade between Peking and Ulan Bator is declining. As might be expected under the circumstances Outer Mongolia is a member of the Soviet Union's answer to the Common Market, namely Comecon which also includes Bulgaria, Czechoslovakia, East Germany, Poland, Hungary and Rumania, but does not include China.

The total forest area is about 12 million hectares which gives 12 hectares per head of population. The timber resources are estimated to be 1,220 million cubic metres of which 96% is coniferous. The yearly

growth is 10 million cubic metres. The main types of tree are Siberian larch in the northern areas, some dwarf elm in the south and poplar in the southwest. The Mongolian People's Republic is self sufficient in most forest products.

Mineral Resources and Industry

The Mongolian People's Republic has modest deposits of a number of minerals, and exploration continues to try and establish whether there are others. Map 3 shows the probable distribution of Outer Mongolia's mineral wealth. Coal and oil are of increasing importance (in 1960 employed 1,530 and 350 workers respectively). In 1962 coal production totalled 854,000 tons which made Outer Mongolia independent of Soviet imports. The main mines are at Sain Shand, Dzun Mod, Yugodzyr and Under Khan (Map 3). Oil production is still as yet modest and Mongolia has to import over half her annual needs from the U.S.S.R. Other important minerals now being mined include fluorspar, pyrites, gold, silver and iron, but as yet the Mongolian People's Republic has hardly begun to exploit the mineral mining possibilities. Shortage of labour and inaccessibility hinder much of the mineral development.

Up to 1956 Mongolian industry was confined mainly to milk processing (which as late as 1955 accounted for 50% of all food processing), wool washing, the curing of hides, and some coal mining. Since 1956 the Soviet Union, some East European countries and China have equipped a number of industrial plants in the Mongolian People's Republic to make use of local materials. The Ulan Bator area dominates in the new developments. By value in 1957 food and light industry accounted for 60% of production and

heavy industry 40%, but by 1963 the percentages were about equal.

Using 1947 as a base year (i.e. 100.0) to compare increases in industrial output the figure for all of Mongolian industry in 1961 was 404.4, with the most dramatic increases in building material production (1171.9) and electricity (902.5). The increase in building material production has been caused by the change from the 'yurt' or tent to the house. With regard to electricity Ulan Bator demonstrates a Communist attitude prevalent since Lenin's advocacy of increased electrical capacity in the 1920's. All towns within the Republic now have electricity, as do all state farms and an increasing number of the smaller rural centres (electricity production in 1952 was 22.7 million Kwh, in 1962 174.9 million Kwh.).

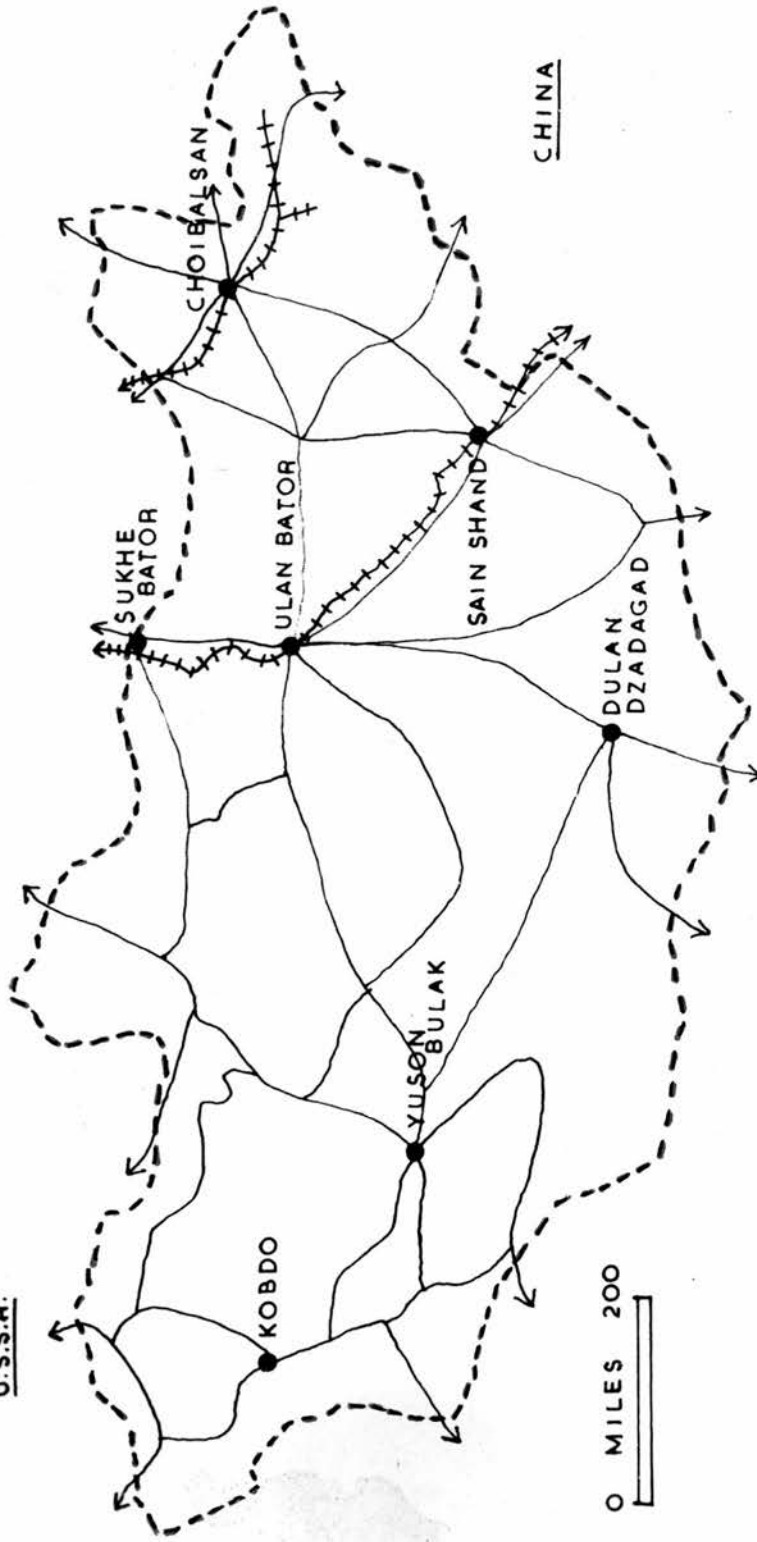
Again somewhat in contrast to China there is great emphasis upon consumer goods production in the Mongolian People's Republic ranging from footwear to confectionery. Industry has two facets in that it either produces for the home market or it processes the state's traditional products such as hides. The character of Mongolia's industrial development is largely determined by the import requirements of the U.S.S.R., and the exports which can be procured from the Soviet Union.

The administration in Ulan Bator has accepted the country's difficult position between the giants of the Soviet Union and China, but endeavours to keep on good terms with both of them. The fact that Outer Mongolia is a Communist state between two other Communist states has been to her advantage. Considerable help has been given to the Mongolian People's Republic in the setting up of industrial plants by both the Soviet Union and the People's Republic of China, aid which in all probability might not have been forthcoming if Mongolia had been either neutralist or sympathetic to the Western countries.

MAP 4. TRANSPORT LINKS

U.S.S.R.

U.S.S.R.



CHINA

CHINA

AFTER G.W. HEMY, 1963. MAP 19.

INTERNATIONAL
BOUNDARY (MONGOL VER.)
RAILWAYS
ROADS

Communications

A good transport system, supplemented by such other communications as radio, television, telephones and telegraph facilities, can provide the most useful of tools for a government trying to bring effective political control to all areas of the state. The Mongolian People's Republic lacks such a network. Low population densities, lack of capital and labour, and the agricultural nature of the economy have all inhibited the development of a comprehensive communications system throughout the state area.

As in the Soviet Union railways make up the most importance branch of Outer Mongolia's transportation network, carrying 97.2% of all freight in 1957 and 93.9% in 1960. This compares with road transport's share in freight in 1957 being 2.7% of the total and rising to 6% in 1960, and the trifling amount carried by water and air.

The main railway line (Map 4) runs from the Mongol-Soviet boundary via Sukhe Bator to Ulan Bator (completed in 1949), and then via Dzamin Ude to the People's Republic of China (completed in 1956). The Ulan Bator railway was built with Soviet and Chinese aid and provides a through connection between Moscow and Peking. The main workshops are at Ulan Bator, but there are other depots at Sain Shand, Dzamin Ude and Choiren. A narrow gauge line in eastern Outer Mongolia links Choibalsan and Tamsag Bulak with the Soviet Union at Soloviev. In 1952 there was 420 miles of railway track in the Mongolian People's Republic, which had increased to 860 miles in 1955 and 873 miles in 1960. The average length of the journeys declined from a 1957 figure of 524 miles to 485 miles in 1960. As the railways provide the only efficient and economic form of transport within Outer Mongolia

they are overworked. The railways provide a useful economic outlet to the U.S.S.R. and China, but their modest dimensions make them of limited use in the task of welding together the state area into a cohesive political unit. However, the passengers carried have been rapidly increasing in number even if the mileage of new line has not.

Since 1952 the length of so called roads has kept steady at about 47,005 miles (Map 4); this includes practically every dirt track in the state and there is not really one road which qualifies for the term 'modern'. For example the road programme for improvement in 1961 consisted of 52 miles of embellishment by turning earth roads into rubble and earth roads, and the construction of 13 wooden bridges. In the construction of a more modern road system the Mongolian People's Republic is limited by the low density of population throughout the state, and the related lack of labour and capital to carry out such a programme. In 1960 the average road freight journey was only 36 miles. The average length of a passenger journey by road in 1960 was only 4 miles. There are nine road connections with Chinese territory (Map 4) and seven with Soviet areas, but road transport within the Mongolian People's Republic is catering mainly for local needs and to supplement the railways. In 1960 with regard to motor transport freight the most busy province was Choibalsan in the northeast, with Ulan Bator next, followed by Dzabkhan (7.11) and Arkhangai (7.10). Selenga, due to its modest size (it is the smallest of the provinces) and the convenience of the railway, had the least use of road freighting. Ulan Bator and Choibalsan are the new centres of industry. In passengers Ulan Bator's road transport carried the most, the lowest was again Selenga province.

Of increasing significance within Outer Mongolia is air transport. Ulan Bator is linked with Moscow and Peking, and most of the larger settlements in the Mongolian People's Republic have air fields. Air freight was modest in 1960 but had increased 40% over the 1959 figure. During the same period there was a similar rise in air passenger travel. However, despite the possibilities with regard to air transport it is unlikely to compensate for the inadequacies of the road and rail network.

Other forms of communication which are increasing in importance are post offices (30 in 1947 and 230 in 1960), telegraph offices (20 in 1947, 25 in 1960), radio relay stations (52 in 1960 and 76 in 1961), and telephone exchanges (25 in 1947 and 36 in 1960). The post office handled 1.2 million letters and 3,100 parcels in 1947 and 6.6 million letters and 49,600 parcels in 1960. Similarly telegrams dispatched rose from 531,000 in 1947 to 630,000 in 1960. There were only 5,554 telephones in Outer Mongolia in 1960, and although this is double the 1947 figure (2,615) it represents very slow progress.

The communications network within the Mongolian People's Republic is that of an economically underdeveloped country. It prevents the effective political administration of the state area because of its limiting inadequacies. Outer Mongolia needs to improve all aspects of the state communications system; the situation is well represented by the figures for radios within the country in 1960, these totalled 24,000 or 1 set for every 35 people. There is an area between China and the U.S.S.R. which has a distinctive flavour because of Mongol nationalism but this does not conform to the present political limits of the Mongolian People's Republic. There is, therefore, a need to impose effective government from Ulan Bator throughout the state area so those zones which are not allied to the state by Mongol nationalism will not break away. Nothing is more important in the promotion of effective government from Ulan Bator than adequate communications, whether to influence by propaganda, or by easy access.

CHAPTER FIVE : Conclusion

The Mongolian People's Republic is a member of the United Nations and has formal diplomatic relations with thirty countries. The first non-Communist state recognised Outer Mongolia in 1955 (it was India). Up until 1955 Ulan Bator was a satellite of the U.S.S.R., in fact in the early 1940's Stalin had considered incorporating this state the size of Western Europe into the Soviet Union. Since the mid-1950's the Mongols have been showing a great deal more independence, although their connections with Moscow still predominate in all their foreign relations. They procure most of their needs from the U.S.S.R. and export most of their surplus to the north. The situation is typified by the distribution of Mongol students abroad; of the total of 3,000 Mongols at foreign universities in 1964, over 2,000 were in Soviet universities, whilst most of the rest were in those institutions of higher learning of the Eastern European Communist countries. Only a handful were at Chinese universities. If there is any challenge to the Mongolian state's claim to be a separate entity it comes from the north, not the south.

Outer Mongolia is a state which has come into being to fulfil the demands of Mongol nationalism. The bulk of the population is Mongol and this is the strength of the Mongolian People's Republic. There are strong forces within the state to challenge the effectiveness of the central government's administration, but the regime ruling from Ulan Bator has a success based primarily upon Mongol nationalism backed by Soviet patronage.

What are the forces of disintegration within the Mongolian People's Republic? One of the strongest challenges faced by the Mongols throughout their history has been that of Chinese culture. Few civilisations have

had the assimilation power of the Chinese; the Chinese were always willing to accept as equals those of other groups who were willing to adhere to the Chinese culture. Just as Europe has indulged in cultural missionizing since the Sixteenth Century, so for many centuries Chinese civilisation has expanded outwards. It was not until the late Nineteenth Century that the possibility of being swamped by Chinese culture became crucial to the Mongols, the Han Chinese having accepted certain technical innovations from Europe to broaden their field of influence (e.g. the railway). This challenge from the south also produced a stimulation of Mongol nationalism. However, alone the Mongols would have not been strong enough to counteract the impact of Chinese culture based on Han immigration. The outcome was an appeal to their neighbour in the north, first in the form of Tsarist Russia, and after 1917 the Soviet Union. Although it would seem unlikely that the U.S.S.R. will absorb the Mongolian People's Republic into its state area, the price paid by the Mongols for the neutralising of the threat from the south has been a relationship with the Soviet Union which makes their independence only nominal in many ways. Outer Mongolia is perhaps the most classic example of a Soviet satellite at present in existence, although it would be easy to underestimate the amount of independence enjoyed by the administration in Ulan Bator. The Mongolian economy is tied closely to that of the U.S.S.R., the administrative machine within the state is modelled upon that of Moscow, and it would not be feasible for Ulan Bator to support Peking in the Sino-Soviet ideological dispute. The Mongolia-Soviet boundary has little significance because of the amicable relations existing between the two states, and the dependence of the Mongolian People's Republic upon the Soviet Union for its continuing independence. Although Ulan Bator

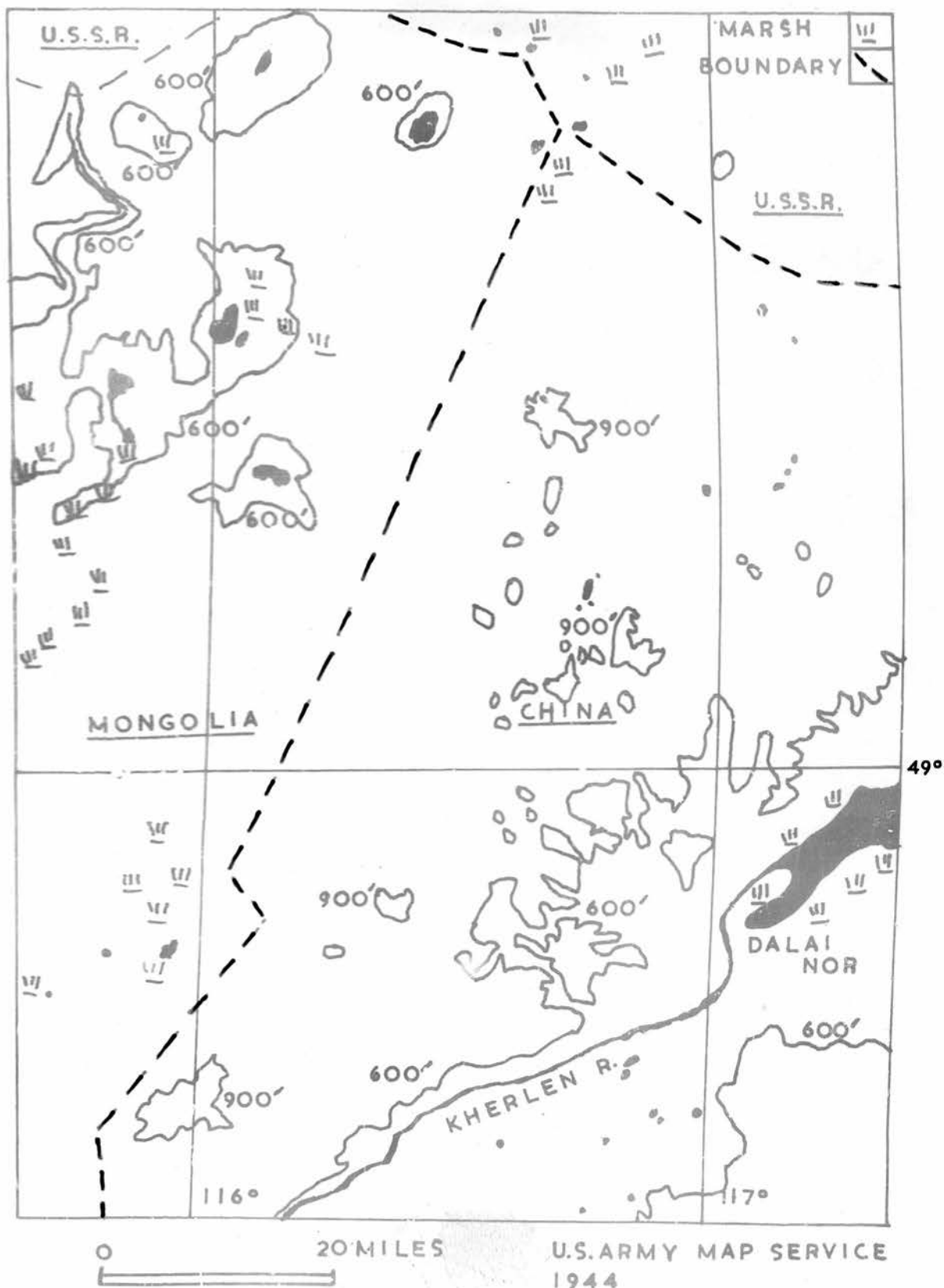
endeavours to remain on good terms with Peking the Mongols are still worried by the possibility of cultural absorption by the Chinese; this is probably the prime reason for the decrease in the number of Chinese labourers within Outer Mongolia during the past year. The continuance of the Mongolian People's Republic as a separate entity depends to a great extent upon Soviet patronage which must be bought at the cost of perhaps excessive Soviet influence in Mongol affairs. This is not resented by the Mongol nationalists as Soviet patronage is preferable to Chinese cultural absorption.

Besides the disintegrating factors involved in a small, but distinct, cultural group being placed between two vast states Outer Mongolia has certain internal weaknesses which do not assist the effectiveness of the central authority within the state area. The population is evenly, but sparsely, spread over the country which makes administration from Ulan Bator difficult. The same problem of sparse population leads to the need for a comprehensive transport network without the capital available to support it or if it was built any possibility of it being economic to run. Perhaps the greatest vehicle still largely unexploited with regard to producing a feeling of unity throughout the state area is radio and, later, television. It is surprising that a Communist state has not made greater use of such forms of communication.

The minority groups such as the Kazakhs within Outer Mongolia are not as yet militant, but do represent a challenge to the coherence of the Mongol state. If handled carelessly the Kazakhs or Uighurs could bring about disunity within the Mongolian People's Republic, but they represent only a small part of the total population and it may prove possible to culturally absorb them when such developments as the educational programme is fully effective.

The totalitarian nature of Communist government makes administration

MAP 1. SINO-MONGOLIAN BOUNDARY



MAP 1. SINO-MONGOLIAN BOUNDARY.

BASED ON U.S. ARMY
MAP SERVICE 1944.

POLITICAL BOUNDARY
MARSH

MONGOLIA

CHINA

MILES 20

450

140

1150

1160

within a country like Outer Mongolia somewhat easier. But often hindering the Mongol government is the level of technology within the state. Since gaining independence the Mongolian People's Republic has made impressive progress, but has far to go before it resembles technologically an Asian state such as Japan. A sophisticated technology makes the administration of a state easier because the vehicles for the various branches of government are more comprehensive and of a higher standard.

State administrations often tend to become less effective the further from the centre of government. This is true of the Mongolian People's Republic, notably in the south along the Sino-Mongolian Boundary. In the main the southern area is less developed economically than the rest of Outer Mongolia. Here there has been traditionally a frontier zone between the herdsmen Mongols and the cultivating Chinese. A frontier zone still exists in the south, although the delimitation of a boundary would provide a regularising feature in the area. The Mongol and Chinese versions of the Sino-Mongol boundary have all been within Boggs' 'Compound' or Hartshorne's 'Subsequent' categories, being made up of geometric lines and delimitation along minor physical features. Map I shows part of the boundary upon which the Chinese and Mongols have ^{partly} ~~long~~ agreed and it is a straight line delimitation. But the bulk of the delimitation in both the Chinese and Mongol versions has been along minor physical features such as in Map Ia. which is part of the Mongolian line. Although it has failed to come out clearly on Map Ia, the western part of the line is along some very low hills (crestline), whilst the eastern section is along a minor watershed. The discrepancies in the delimitation of the Sino-Mongolian boundary may have already been overcome following the 1962 treaty, but if not they will not be of great importance until such time as the Chinese

and Mongols decide to extend their effective administration right up to the boundary. At present Sino-Mongolian relations are reasonably good despite the traditional Mongol mistrust of the Chinese and Ulan Bator's favouring of the Soviet position in the ideological conflict between Peking and Moscow. The boundary, whether it has been delimited or not, is not being effectively imposed upon the human geography of the frontier zone and is therefore only of limited significance.

It cannot be said that the Mongolian People's Republic represents an entity other than on the grounds of Mongol nationalism and an economy which is predominantly pastoral, however, this is a sounder basis for unity than can be found in such states as Burma with a *mêlée* of nationalities and cultural levels. The effectiveness of the central administration within the area of Outer Mongolia is largely inhibited by underdeveloped communications and sparsely distributed population. The viability of the state is also limited by the excessive influence of the Soviet Union within the Mongolian People's Republic, but without whose patronage the state would not and could not exist in face of the threat from the south. Neither of the boundaries (i.e. the Soviet-Mongolian and the Sino-Mongolian) provide divisions within the landscape. Soviet-Mongol relations are such as to limit the functions of the boundary between the two states to a minimum, whilst there exists between China and Mongolia a frontier zone within which there is a transition from the livestock economy of the Mongols to the cultivation of the Chinese. If the boundary was to be drawn according to the human geography of the frontier zone it would probably be further south of the Mongol version and include those areas of Inner Mongolia, Kansu and Sinkiang where Chinese efforts to introduce dry farming have proven unsuccessful and livestock herding still remains dominant.

SECTION EIGHT : Conclusion

'The concept of international boundaries now prevailing is of recent origin. As late as the Eighteenth Century most national groups were separated one from the other by zones either completely unsettled or at least less intensely developed than the norm for the national area. The term 'frontier' denotes such a zone, having breadth as well as linear dimension'.¹ Today China has a number of frontier zones, some of which she is trying to assimilate into the state area, but others which she appears content to leave for the present as they are. Such a comparatively underdeveloped and vast state could not expect to have the coherence over its area enjoyed by the technically more advanced countries such as the United Kingdom.

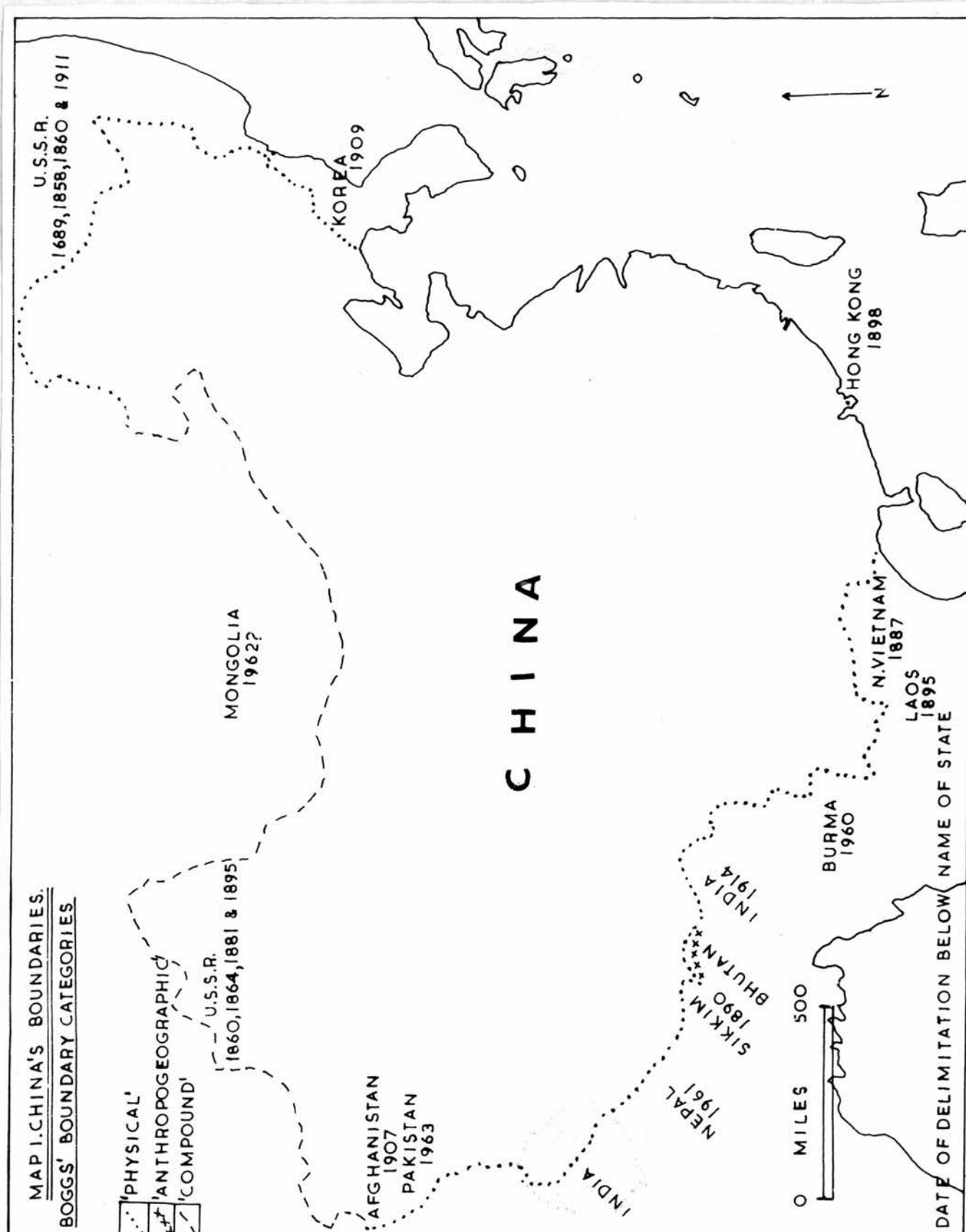
Within China there are a number of minorities unrelated to the Han, such as the Turkic peoples of Sinkiang, and also a body of Han Chinese who are hostile to the rule of Peking, such as the Chinese Moslems (Dungans). Similarly, there has been a traditional economic division between the north and south of China, leading to a difference in outlook between the drier northern wheat lands and the rice areas of the south. In much the same way there has tended to be a division in Inner Mongolia between the dry farming lands of the Chinese and the pastoral economy of the Mongolians.

Increasing technological ability makes physical considerations of less and less importance. This is well illustrated by northern China where first the use of irrigation enabled the Chinese to expand into areas which they could not farm before when they relied solely upon rainfall. But

1. U.S.State Department, Geographic Report No.I: 'Boundary Concepts & Definitions'; Washington, April 28th. 1961, p.1.

then the advent of railways in the latter part of the Nineteenth Century permitted an expansion into the more northerly lands. The administration in Peking has a plan to convert the whole of the pastoral areas of Inner Mongolia into a wheat growing belt. There is at present a frontier between the Mongolian People's Republic and China (despite the possibility that the boundary may have been delimited) as Mongol pastoralism predominates in the boundary region. When Chinese technology permits the growing of wheat up to the boundary line the broad border zone will have ceased to exist. The position with regard to the Sino-Mongolian border area is reasonably typical of the situation prevailing along much of the periphery of China's core area.

Many of the northern areas of the Himalayan states such as India, Nepal, Sikkim and Bhutan have close relations with Tibet, both in population and cultural characteristics. This might give China a good basis from which to claim these areas, but she has yet to make Tibet itself a part of the People's Republic in other than imperial terms. Since the Chinese invasion of Tibet in 1950-51 there has been a hostility to the Han which has frequently broken out in violent revolt. The building of a road and rail network binding Tibet more closely with the rest of China has begun to pay handsome dividends for Peking, but it will be a long time before Tibet can be considered 'Chinese'. The Han form of assimilation whereby Chinese immigrants eventually swamp the indigenous population as in Inner Mongolia is at present being put into effect in Tibet. In Inner Mongolia there are now five times as many Chinese as Mongols, but the suggestion for Tibet is that to the present Tibetan population of up to 3 million inhabitants as many as 16 million Chinese farmers and administrators can be added. This is the sort of



integration which is largely irresistible, although it is worth noting that the Mongols of Inner Mongolia welcomed the Japanese forces and fought with them against the Chinese during the Sino-Japanese War of 1937-45. A dissident minority is, however, preferable to a dissident majority.

Such differences as those which are found between northern and southern China would be of decreasing significance if the communications within China were more comprehensive. Regional differences are encouraged by regional isolation and the building of a good road and railway network is the first requirement if China is to become an entity.

Communist China has concluded boundary agreements with Outer Mongolia, Pakistan, Nepal and Burma. Map I shows the dates of delimitation of China's boundaries, and also their type according to Boggs' classification. As it is as yet uncertain whether the Sino-Mongolian agreement included a boundary delimitation a question mark has been placed after the date. Those without dates have as yet been undelimited. China finds the MacMahon boundary delimitation of 1914 in the area of the North East Frontier Agency of India unacceptable. Of the boundaries only that between China and Hong Kong can be said to provide an effective divide upon the landscape with the impact of the two central authorities felt fully up to the line. An effort is being made in Central Asia since the deterioration of Sino-Soviet relations to make the Sino-Soviet boundary in this area more effective with the mobility of the indigenous nomadic tribes inhibited. This attitude towards the Sino-Soviet boundary contrasts to that prevailing in Peking regarding the Sino-Vietnamese and Sino-Korean lines. China appears to have the friendliest of relations with the latter two

Communist states, and this is reflected in the boundary area where administration is relaxed. Except for the Korean minority in China the Sino-Korean boundary makes an effective division both in the physical geography and the human geography of the border area. Such is not the case with the Sino-Vietnamese boundary, nor many of China's other southern borderlands. Here Chinese assimilation of the minority groups has not as yet had much effect and there is a scattering along the boundaries of peoples of limited culture owing allegiance only to their tribe.

China's core area is in her eastern provinces and the impact of Chinese influence decreases the further from the core area one goes. Laos, Bhutan or Northwestern India are marginal to the influences of Han culture and the predominance of tribal, rather than state, allegiance in the boundary areas makes any delimitation of limited geographical significance. Neither of the latter two states have effectively delimited their boundaries with China. Until the advent of Communist power in Peking the borders of China in most areas were underdeveloped and little explored lands providing frontiers with other states equally unconcerned in most cases with defining more precisely the boundaries. The Chinese invasion of Tibet in 1950-51, and the following hostility of the Tibetan population, led to Peking endeavouring to close Tibet's southern boundaries so that for a number of years the freedom of movement traditional between Tibet and India, Tibet and Nepal, Tibet and Sikkim, and Tibet and Bhutan during the trading season decreased dramatically, but with the stabilising of the situation in Tibet China has once again relaxed trade in the Himalayan area, and also stopped restricting the movement of the

tribesmen within the areas straddling the boundaries (with the exception of the Sino-Indian border).

The ideological dispute between Communist China and the U.S.S.R.,² despite Chinese claims that 'We want unity, not a split', has had a certain amount of effect along Chinese boundaries with the Soviet Union, although it must be appreciated that the attitude towards non-Communist states is the same. As Communist countries both China and the U.S.S.R. are adherents to the ultimate concept of an all-Communist world. Although China may advocate the use of force for establishing Communist regimes and the Soviet Union more peaceful methods there is a threat to the non-Communist states along the boundaries of both. Despite a disagreement China is not likely to suggest a military conquest of the Soviet Union or the Mongolian People's Republic as they are Communist states, but Laos is a quite different matter.

There appears to be certain priorities regarding the non-Communist states bordering China as apparently it is possible for Peking to reach a boundary agreement with the Western allied Pakistan, but not the major neutralist state of India. However, Pakistan does not challenge China's predominance within Asia as does India, and this must make the humiliation of the latter of much importance to a Peking determined to spread the influence of Chinese Communism as widely as possible. The easy defeat of the Indian troops established in the eyes of many Asian leaders that New Delhi offered no protection against the power of China. Having gained control of the highway through Aksai Chin in the most complete manner, and having done much to crush Indian influence in Asia, the present position

2. Leader article in the 'People's Daily'; Peking, July 13th, 1963.

prevailing along the Sino-Indian borders may be quite acceptable to Peking. It is not against the interests of China to have a frontier between India and China rather than a delimited and demarcated boundary.

With the exception of Laos, where the Communist 'revolution' is well under way, the minor neutralist states provide no challenge to Chinese supremacy within Asia and can be treated by Peking with a generosity which is not available to India. The boundary with Nepal has been delimited and demarcated and now China is increasing her influence within her neighbour by transport links and the granting of aid. The Communist parties in Nepal, Sikkim, Bhutan and Afghanistan are practically non-existent, and that within Burma has been largely defeated, so possibly Peking feels there is more to be gained by increasing Chinese influence in these states by peaceful means than the launching of military attack which would increase hostility towards China in Asia and which could not expect much support from sympathisers within the attacked countries.

In many respects it is surprising that China has been so active in her border areas since 1949, considering the disunity over much of China itself. China is not territorially mature as the whole of the state area has not been integrated, and yet Peking still has territorial ambitions with regard to the surrounding areas. Even in the Han Chinese core area although the written language leads to cultural cohesion, the differences in the spoken language have been emphasised over centuries of regional isolation so that there is a gulf between the northerner and the southerner. Similarly, economic cohesion is a post-1949 phenomena which has arrived with the Communist ideas of state planning, but which has had an uphill fight against the conservatism of the population, and has seen the failure of such pro-

jects as that of the Communes.

The divisions within China are not a modern development. The south and north divided between the Fourth and Sixth Centuries A.D., and again in the Twelfth Century A.D. when the Kin Tartars ruled north of the Yangtze and the Sung Empire was still dominant in the south. Today such provincial divisions as those of Tibet, Sinkiang and Inner Mongolia still defy integration. But the Han Chinese have the advantages of a stronger culture, and overwhelmingly superior numbers. The building up of a good communications network in such fringe zones as Sinkiang, and the determination of Chinese economic planners to counteract the pre-eminence of the eastern areas of China in industry and commerce by a movement westwards, will mean the eventual swamping of the local cultures and tribal loyalties. However, the cohesive force of Chinese culture and administration has as yet had only a short time in which to implement policy in the non-Han provinces. Under a totalitarian dictatorship such as that prevailing in Peking progress towards welding China's area into an entity will be faster than it has been in a parliamentary democracy such as Canada, but it will be many years before the secular state can absorb the Moslem Dzungars or Lamaist Tibetans. Assuming that such factors as communications within the peripheries are adequate by 1970, it cannot be expected that the generation which has matured in an environment of non-Han traditions can be successfully converted both to Communism and Chinese culture. The following generation is the one more likely to be successfully absorbed by the Chinese so that it is perhaps not too dangerous a prediction to make to say that it would seem likely that it may be the end of this century before such anti-Chinese considerations as Uighur or Kazakh

nationalism have been overcome.

One of the Marxist concepts to which Peking periodically pays lip service is that of the eventual withering away of the state. In 1958 it was proclaimed that at some future date the only function of the state would be to protect the population from external attack. But since 1952 Peking has taken a number of steps to increase the powers of the central authorities in China. In the purge of the Communist leaders Kao Kang and Jao Shu-shih the main charge was one of developing local power at the expense of the central authority. 'Centralisation of power has been a consistent purpose of strong Chinese governments over the past two thousand years, and centrifugal forces in the direction of provincial or regional autonomy have represented a persistent counteraction to it.'³ Perhaps the most dramatic challenge to the efforts of Peking to centralise power within China since 1949 has come from Tibet. Here in 1957 the Chinese had to retreat, and withdrew their Han cadres and promised not to introduce any reforms until after 1962. But this did not satisfy the Tibetans who rose in rebellion in March of 1959, with the Dalai Lama fleeing to India in the same year. Chinese troops were reinforced in Tibet and all signs of opposition ruthlessly crushed. Efforts were made to seal off Tibet along the Himalayan border, a state of affairs which has since been relaxed.

In conclusion it can be said that China does not make a single unit, nor have the majority of her borders, even where delimited as boundaries, become divisions in the geography of the periphery areas of the state. China is a multinational state surrounded by other countries which in the

3. A.D.Barnett: 'Communist China & Asia'; Council on Foreign Relations & Vintage Books, New York 1961, p.26.

main share a similar problem of dissident minorities. As it is hoped it has been shown there are exceptions, such as Hong Kong and the Sino-Hong Kong boundary, or possibly Korea and the Sino-Korean boundary, so that any generalisation on the Chinese borderlands, or China itself, has its limitations. In the past the main problem in the failure of the Han Chinese to integrate their frontier zones would seem to be the poor communications within the state as a whole, but particularly in the minority areas. A good road and railway network will lead to the collapse of a minority culture as witness the decline of the Welsh tongue in recent years, or the complete disappearance of the Cornish language in the Nineteenth Century. Language differences especially lead to minority groups, and language differences themselves survive because of isolationism. As has been proven in the Manchu and Mongol areas of China there is little difference between the Han and the minority groups once the Chinese culture has been accepted. Even the distinctive head shape of the Manchus was found to be the outcome of their using wooden pillows for their children to sleep on. If the minority areas are brought more closely within the Chinese field of influence by means of efficient communications (road, rail, air, radio and television) there will be a breaking down of local nationalisms, and greater state coherence. A change of attitude amongst the minorities will not only lead to China having more the appearance of a single entity, but due to a shift of allegiance (notably away from the tribe to the state) the frontier zones will become integrated within the country, and the boundaries divisions within the geography of the border areas.

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Appendix A. The Sino-Burmese Boundary Treaty.

"The Government of the People's Republic of China and the Government of the Union of Burma, with a view to promoting an over-all settlement of the Sino-Burmese boundary question and to consolidating and further developing friendly relations between China and Burma, have agreed to conclude the present Agreement under the guidance of the Five Principles of Peaceful Co-existence and have agreed as follows:

Article 1:

The Contracting Parties agree to set up immediately a joint committee composed of an equal number of delegates from each side and charge it, in accordance with the provisions of the present Agreement, to discuss and work out solutions on the concrete questions regarding the Sino-Burmese boundary enumerated in Article 2 of the present Agreement, conduct surveys of the boundary and set up boundary markers, and draft a Sino-Burmese Boundary Treaty. The joint committee shall hold regular meetings in the capitals of the two countries or any other places in the two countries.

Article 2:

The Contracting Parties agree that the existing issues concerning the Sino-Burmese boundary shall be settled in accordance with the following provisions:

- 1) With the exception of the area of Hpimaw, Gawlum and Kangfang, the entire undelimited boundary from the high conical peak to the western extremity of the Sino-Burmese boundary shall be delimited along the traditional customary line, that is to say, from the high conical peak northward along the watershed between the Taiping, the Shweli, the Nu (Salween) and the Tulung (Taren) Rivers on the one hand and the Nmai Hka River on the other, up to the place where it crosses the Tulung (Taren) River between Chingdam and Nhkumkang, and then along the watershed between the Tulung (Taren) and the Tsayul (Zayul) Rivers on the one hand and all the upper tributaries of the Irrawaddy River, except for the Tulung (Taren) River, on the other, up to the western extremity of the Sino-Burmese boundary. The joint committee shall send out joint survey teams composed of equal numbers of persons from each side to conduct surveys along the above-mentioned watersheds so as to determine the specific alignment of this section of the boundary line and to set up boundary markers.

- 2) The Burmese Government has agreed to return to China the area of Hpimaw, Gawlum and Kangfang which belongs to China. As to the extent of this area to be returned to China, it is to be discussed and determined by the joint committee in accordance with the proposals put forward and marked on maps by the Governments of Burma and China on February 4th, 1957 and July 26th, 1957 respectively. After determining the extent of this area to be returned to China, the joint committee shall send out joint survey teams composed of an equal number of persons from each side to conduct on the spot survey of the specific alignment of this section of the boundary line and to set up boundary markers.
- 3) In order to abrogate the 'perpetual lease' by Burma of the Meng Mao Triangular Area (Namwan Assigned Tract) at the junction of the Namwan and the Shweli Rivers, which belongs to China, the Chinese Government has agreed to turn over this area to Burma to become part of the territory of the Union of Burma. In exchange, the Burmese Government has agreed to turn over to China to become part of Chinese territory the areas under the jurisdiction of the Panhung and Panlao tribes, which are west of the boundary line from the junction of the Nam Ting and the Nampa Rivers to the number one marker on the southern delimited section of the boundary as defined in the notes exchanged between the Chinese and British Governments on June 18th, 1941. As to the extent of this area to be turned over to China, the Chinese and the Burmese Governments put forward proposals marked on maps on July 26th, 1957 and June 4th, 1959 respectively. The area where the proposals of the two Governments definitely coincide will be turned over to China. Where the proposals of the two Governments differ as to the area under the jurisdiction of the Panhung tribe, the joint committee will send out a team composed of an equal number of persons from each side to ascertain on the spot as to whether it is under the jurisdiction of the Panhung and Panlao tribes so as to determine whether it is to be turned over to China. After the extent of the areas under the jurisdiction of the Panhung and Panlao tribes to be turned over to China has been thus determined, the joint committee will send out joint survey teams composed of an equal number of persons from each side to conduct on the spot survey of the specific alignment of this section of the boundary line and to set up boundary markers.

- 4) Except for the adjustment provided for in paragraph 3 of this Article, the section of the boundary from the junction of the Nam Ting and the Nampa Rivers to the number one marker on the southern delimited section of the boundary shall be delimited as defined in the notes exchanged between the Chinese and the British Governments on June 18th, 1941. The joint committee shall send out joint survey teams composed of equal numbers of persons from each side to carry out delimitation and demarcation along this section of the boundary line and set up boundary markers.

Article 3:

The Contracting Parties agree that the joint committee, after working out solutions for the existing issues concerning the Sino-Burmese boundary as enumerated in Article 2 of the present Agreement, shall be responsible for drafting a Sino-Burmese Boundary Treaty, which shall cover not only all the sections of the boundary as mentioned in Article 2 of the present Agreement, but also the sections of the boundary which were already delimited in the past and need no adjustment. After being signed by the Governments of the two countries and coming into effect, the new Boundary Treaty shall replace all old treaties and notes exchanged concerning the boundary between the two countries. The Chinese Government, in line with its policy of being consistently opposed to foreign prerogatives and respecting the sovereignty of other countries, renounces China's right of participation in mining enterprises at Lufang of Burma as provided in the notes exchanged between the Chinese and the British Governments on June 18th, 1941.

Article 4:

- 1) The present Agreement is subject to ratification and the Instruments of Ratification will be exchanged in Rangoon as soon as possible.
- 2) The present Agreement will come into force immediately on the exchange of the Instruments of Ratification and shall automatically cease to be in force when the Sino-Burmese Boundary Treaty to be signed by the two Governments comes into force.

Done in duplicate in Peking on January 28th, 1960, in the Chinese and English languages, both texts being equally authentic.

For the Government of the
People's Republic of China:
Chou En-lai.

For the Government of the
Union of Burma:
Ne Win.

Appendix B. The Sino-Pakistani Boundary Treaty.

"The Government of the People's Republic of China and the Government of Pakistan, having agreed, with a view to ensuring the prevailing peace and tranquillity on the border, to formally delimit and demarcate the boundary between China's Sinkiang and the contiguous areas, the defence of which is under the actual control of Pakistan, in a spirit of fairness, reasonableness, mutual understanding and mutual accommodation, and on the basis of Ten principles enunciated in the Bandung Conference; being convinced that this would not only give full expression to the desire of the peoples of China and Pakistan for developing good neighbourly and friendly relations, but also help safeguard Asian and world peace; have resolved for this purpose to conclude the present Agreement and appointed their respective plenipotentiaries and have agreed upon the following:

Article 1:

In view of the fact that the boundary between China's Sinkiang and the contiguous areas, the defence of which is under the actual control of Pakistan, has never been formally delimited, the two Parties agree to delimit it on the basis of the traditional customary boundary line, including natural features, and in a spirit of equality, mutual benefit, and friendly co-operation.

Article 2:

1) In accordance with the principle expounded in Article One of the present Agreement, the two Parties have fixed, as follows, the alignment of the entire boundary line between China's Sinkiang and the contiguous areas, the defence of which is under the actual control of Pakistan.

1) Commencing from its northwestern extremity at Height 5,630 metres (a peak, the reference coordinates of which are approximately Longitude 74 degrees 34 minutes E. and Latitude 37 degrees 3 minutes N.), the boundary line runs generally eastward and then southeastward strictly along the main watershed between the tributaries of the Tashkurgan River of the Tarim River system on the one hand and the tributaries of the Hunza River of the Indus River system on the other hand, passing through the Kilik Daban (Dawan), the Mintaka Daban (Pass), the Kharchanai Daban (named on the Chinese map only), the Kutejilga Daban (named on the Chinese map only), and the Parpik Pass (named on the Pakistan map only), and reaches the Khunjerab (Yutr) Daban (Pass).

- ii) After passing through the Khunjerab (Yutr) Daban (Pass), the boundary line runs generally southward along the above mentioned main watershed up to a mountain top south of the Daban (Pass), where it leaves the main watershed to follow the crest of a spur lying generally in a southeasterly direction, which is the watershed between the Akjilga River (a nameless corresponding river on the Pakistan map) on the one hand, and the Taghdumbash (Oprang River) and the Keliman Su (Oprang Jilga) on the other hand. According to the map of the Chinese side, the boundary line, after leaving the southeastern extremity of this spur, runs along a small section of the middle line of the bed of the Keliman Su to reach its confluence with the Kelechin River. According to the map of the Pakistan side, the boundary line, after leaving the southeastern extremity of this spur, reaches the sharp bend of the Shakagam or Muztagh River.
- iii) From the aforesaid point, the boundary line runs up the Kelechin River (Shakagam or Muztagh River) along the middle line of its bed to its confluence (reference coordinates Longitude 76 degrees 2 minutes E. and Latitude 36 degrees 26 minutes N.) with the Sorbulak Daria (Shimshal River or Braldu River).
- iv) From the confluence of the aforesaid two rivers, the boundary line, according to the map of the Chinese side, ascends the crest of a spur and runs along it to join the Karakoram Range main watershed at a mountain top (reference coordinates approximately Longitude 75 degrees 54 minutes E. and Latitude 36 degrees 15 minutes N.), which on this map is shown as belonging to Sherbulak Mountain. According to the map of the Pakistan side, the boundary line from the confluence of the above-mentioned two rivers ascends the crest of a corresponding spur and runs along it, passing through Height 6,520 (21,390 feet) till it joins the Karakoram Range main watershed at a peak (reference coordinates approximately Longitude 75 degrees 57 minutes E. and Latitude 36 degrees 3 minutes N.).
- v) Thence, the boundary line, running generally southward and then eastward, strictly follows the Karakoram Range main watershed which separates the Tarim River drainage system from the Indus River drainage system, passing through the East Muztagh Pass (Muztagh Pass), the top of the Chogri Peak (K2), the top of the Broad Peak, the top of the Gasherbrum Mountain (8,068), Indirakeli Pass (named on the Chinese

map only) and the top of the Teram Kangri Peak, and reaches its south-eastern extremity at the Karakoram Pass.

- 2) The alignment of the entire boundary line, as described in Section One of this Article, has been drawn on the 1/1,000,000 scale map of the Chinese side in Chinese and the 1/1,000,000 scale map of the Pakistan side in English, which are signed and attached to the present Agreement.
- 3) In view of the fact that the maps of the two sides are not fully identical in their representation of the topographical features, the two Parties have agreed that the actual features on the ground shall prevail, so far as the location and the alignment of the boundary described in Section One is concerned; and that they will be determined as far as possible by joint survey on the ground.

Article 3:

The two Parties have agreed that:

- 1) Wherever the boundary follows a river, the middle line of the river bed shall be the boundary line; and that
- 2) Wherever the boundary passes through Daban (Pass), the waterparting line thereof shall be the boundary line.

Article 4:

- 1) The two Parties have agreed to set up, as soon as possible, a Joint Boundary Demarcation Commission. Each side will appoint a Chairman, one or more Members and a certain number of Advisers and technical staff. The Joint Boundary Commission is charged with the responsibility, in accordance with the provisions of the present Agreement, to hold concrete discussions on and carry out the following tasks jointly:
 - i) To conduct necessary surveys of the boundary area on the ground, as stated in Article Two of the present Agreement, so as to set up boundary markers at places considered appropriate by the two Parties and to delineate the boundary line on the jointly prepared maps.
 - ii) To draft a Protocol setting forth in detail the alignment of the entire boundary line and location of all the boundary markers and prepare and get printed detailed maps to be attached to the Protocol with the boundary line and the location of the boundary markers shown on them.
- 2) The aforesaid Protocol, upon being signed by the representatives of the Governments of the two countries, shall become an Annex to the present

Agreement, and the detailed maps shall replace the attached maps to the present Agreement.

3) Upon the conclusion of the above-mentioned Protocol, the tasks of the Joint Commission shall be terminated.

Article 5:

The two Parties have agreed that any dispute concerning the boundary which may arise after the delimitation of the boundary line actually existing between the two countries shall be settled peacefully by the two sides through friendly consultations.

Article 6:

The two Parties have agreed that after the settlement of the Kashmir dispute between Pakistan and India, the sovereign authority concerned will re-open negotiations with the Government of the People's Republic of China, on the boundary, as described in Article Two of the Present Agreement, of Kashmir, so as to sign a Boundary Treaty to replace the present Agreement.

Provided that in the event of that sovereign authority being Pakistan, the provisions of this Agreement and the aforesaid Protocol shall be maintained in the formal Boundary Treaty to be signed between Pakistan and the People's Republic of China.

Article 7:

The present Agreement shall enter into force on the date of its signature.

Appendix C. The Sino-Nepalese Boundary Treaty.

"The Chairman of the People's Republic of China and His Majesty the King of Nepal, being of the agreed opinion that a formal settlement of the question of the boundary between China and Nepal is of fundamental interest to the peoples of the two countries; noting with satisfaction that the friendly relations of long standing between the two countries have undergone further development since the establishment of diplomatic relations between the two countries and that the two Parties have, in accordance with the Five Principles of Peaceful Coexistence and in a spirit of fairness, reasonableness, mutual understanding and mutual accommodation, smoothly achieved an overall settlement of the boundary question between the two countries through friendly consultations; firmly believing that the formal delimitation of the entire boundary between the two countries and its consolidation as a boundary of peace and friendship not only constitute a milestone in the further development of the friendly relations between China and Nepal, but also are a contribution towards the strengthening of peace in Asia and the world; have resolved for this purpose to conclude the present Treaty on the basis of the Agreement between the Government of the People's Republic of China and his Majesty's Government of Nepal on the Question of the Boundary between the Two Countries of March 21, 1960 and have agreed upon the followings:

Article 1:

The Contracting Parties, basing themselves on the traditional customary boundary line and having jointly conducted necessary on-the-spot investigations and surveys and made certain adjustments in accordance with the principles and needs of equality, mutual benefit, friendship and mutual accommodation, hereby agree on the following alignment of the entire boundary line from west to east, Chinese territory being north of the line and Nepalese territory south thereof:

- 1) The Chinese-Nepalese boundary line starts from the point where the watershed between the Kali River and the Tinkar River meets the watershed between the tributaries of the Mapchu (Karnali) River on the one hand and the Tinkar River on the other hand, thence it runs southeastwards along the watershed between the tributaries of the Mapchu (Karnali) River on the one hand and the Tinkar River and the Seti River on the

other hand, passing through Niumachisa (Lipudhura) snowy mountain ridge and Tinkarlipu (Lipudhura) Pass to Pehlin (Urai) Pass.

- 2) From Pehlin (Urai) Pass, the boundary line runs along the mountain ridge southeastwards for about 500 metres, then northeastwards to Height 5655 metres, thence continues to run along the mountain ridge northwestwards to Tejang (Tharedhunga Tuppa), then northeastwards passing through Height 5580.6 metres to Chimala Pass, thence it runs generally northwestwards, passing through Chimala to Lungmechiekue (Numeche Tuppa); thence the boundary line runs generally eastwards, passing through Paimowetunkue (Kitke Tuppa) and then runs along Chokartung (Kitke) mountain spur down to the Chilungpa (Yadangre) stream, then it follows the Chilungpa (Yadangre) stream northwards to its junction with the Mapchu (Karnali) River, then it follows the Mapchu (Karnali) River generally eastwards to Yusa (Hilsa). At Yusa (Hilsa), the boundary line departs from the Mapchu (Karnali) River and runs northeastwards along the mountain spur up to Chialesa (Takule), then along the mountain ridge, passing through Kumalatse (Kumalapche), Kangpaochekue (Gharbochheke) and Mainipaimikue (Manepamango) to Kangkuena (Kangarje), then northwards passing through Kangchupeng (Kandumbu) and Height 6550 metres to Nalakankar.
- 3) From Nalakankar, the boundary line runs generally northeastwards along the watershed between the tributaries flowing into the Manasarewar Lake and the tributaries of the Humla Karnali River passing through Nalakankar Pass to Latsela (Lapche) Pass; thence it runs generally southeastwards along the watershed between the tributaries flowing into the Manasarewar Lake and the tributaries of the Machuan River on the one hand and the tributaries of the Humla Karnali River, the Mugu Karnali River and the Panjang Khola on the other hand, passing through Changla mountain, Namja Pass, Khung (Thau) Pass and Marem Pass to Pindu Pass, then it continues to run southeastwards along the watershed between the tributaries of the Machuan River on the one hand and the tributaries of the Barbung River and the Kali Gandaki River on the other hand gradually turning northeastwards to Height 6214.1 metres.

- 4) From Height 6214.1 metres, the boundary line runs northeastwards along the mountain spur, passing through Height 5025 metres and crossing the Angarchube (Angarchhu) stream to Height 5029 metres; thence it runs generally eastwards along Tuchu (Thukchu) mountain spur, passing through Height 4730 metres and Bungla (Panglham) to the foot of Tingli Bhodhe spur at its northwestern end, then turns northeastwards and runs along the southern bank of the Roumachushui (Rhamarchhushu) seasonal stream to the foot of Tingli Bhodhe spur at its northeastern end; thence turns southeastwards, crosses the junction of two seasonal streams flowing northwards, and runs to the junction of three seasonal streams flowing northwards, and then up the eastern stream of the above three seasonal streams to Height 4697.9 metres, then turns southwestwards crossing a seasonal stream to Height 4605.8 metres; thence it runs generally southeastwards passing through Pengpengla (Phumphula) and then along Chukomaburi (Chukomapej) mountain ridge, passing through Height 4676.6 metres and Height 4754.9 metres to Height 4798.6 metres, thence along the mountain ridge northeastwards passing through Hsiabala, then generally eastwards passing through Height 5044.1 metres to Chakle.
- 5) From Chakle, the boundary line runs generally southwards along the watershed between the tributaries of the Yalu Tsangpo River and the tributaries of the Kali Gandaki River, passing through Height 6724 metres to Lugula Pass, thence it runs generally eastwards along Lugula snowy mountain and the watershed between the tributaries of the Yalu Tsangpo River and the tributaries of the Marshiyangdi River to Gya (Gyala) Pass.
- 6) From Gya (Gyala) Pass, the boundary line runs along the mountain ridge eastwards to Height 5782 metres, then southeastwards to Lajing Pass, then it runs along Lajing mountain ridge, passing through Height 5442 metres and Lachang (Lajung) Pass to Height 5236 metres, then turns southwestwards to Sangmude snowy mountain; thence generally southeastwards and continues to run along Lajing mountain ridge, passing through Height 6139 metres to Height 5494 metres, and then in a straight line crosses the Dougar (Tom) River to Height 5724 metres; thence the boundary line runs

generally northeastwards along the snowy mountain ridge, passing through Height 5672 metres to Thaple Pass.

- 7) From Thaple Pass, the boundary line runs generally northeastwards along the snowy mountain ridge, passing through Tsariyangkang snowy mountain to Khojan; thence it continues to run generally southwards along the snowy mountain ridge, passing through Lailatsaching Pass, Pashue snowy mountain and Langpo snowy mountain to Yangrenkangri (Yangra) snowy mountain.
- 8) From Yangrenkangri (Yangra) snowy mountain, the boundary line runs along the mountain ridge southwards to Tsalasungkue and then generally eastwards and then northeastwards along a dry stream bed and passes through Jirape (Kerabas) to reach the Sangching (Sanjen) River, then follows the river southeastwards, passes through its junction with the Changchieh (Bhryange) River and continues to follow the Sangching (Sanjen) River to a point where a small mountain spur south of Genjungma (Pangshung) pasture ground and north of Chhaharey pasture ground meets with the Sangching (Sanjen) River; then it runs along the above small mountain spur eastwards and then southeastwards to Height 4656.4 metres, then runs eastwards to the Black Top; thence it runs along a mountain spur to the junction of the Bhurlung River and the Tangshiaka (Khesadhang) stream, then runs eastwards along the Bhurlung River to its junction with the Kyerong River; thence follows the Kyerong River southwards and then eastwards to its junction with the Tungling Tsangpo (Lende) River; then runs northeastwards up to the junction of the Tungling Tsangpo (Lende) River and the Guobashiachu (Jambu) along the Tungling Tsangpo (Lende) River through Rasua Bridge; thence turns eastwards up the Guobashiachu (Jambu) stream, passing through the junction of the Chusumde Tsangpo River and the Phuriphu Tsangpo River, both the tributaries of the upper Guobashiachu (Jambu) stream, to reach the boundary marker point at Chusumde.
- 9) From the boundary marker at Chusumde, the boundary line runs generally southeastwards along the ridge of Tsegakangri (Seto Pekhari) snowy mountain, Langtang snowy mountain, Dorley mountain and Gulinchin (Phurbo Chyachu) mountain to Chakesumu (Kharaney) mountain; thence runs down to reach the Changnibachu (Kharaney) River and then follows the river southwards to its junction with the Bechu (Bhote Kosi) River; then

follows the Bhechu (Bhete Kesi) River southwards, passing through Dalaima (Bhaise) Bridge to the junction of the Bhechu (Bhete Kesi) River and the Junchu (Jum) River; thence eastwards up the Junchu (Jum) River to its source at Tsaje mountain (Jum Khela Ke Sir Ke Tuppa); thence the boundary line runs generally northwards along the mountain ridge to Chemo Pamari (Height 6208.8 metres).

- 10) From Chemo Pamari (Height 6208.8 metres), the boundary line runs generally northwards along the mountain ridge to Height 5914.8 metres, then generally northeastwards along Shondeme Kangri (Sudeme) snowy mountain passing through Height 5148 metres, and then crosses two tributaries of the Shondeme Chu (Shengdeme) stream, passing through Shondeme (Sudeme) which lies between the above two tributaries to Gyanbayan, then runs along Gyanbayan mountain spur downwards, crosses the Pinbhu Tsangpo River (the western tributary of the Lapche River), and then along the mountain spur up to Height 5370.5 metres at Sebeberi (Kerlang Pari Ke Tippa); thence the boundary turns southeastwards along the mountain spur downwards, crosses the Lapche Khung Tsangpo River (the eastern tributary of the Lapche River), then it runs along Bidin Kangri (Piding) snowy mountain to Height 5397.2 metres; thence the boundary line turns westwards along the mountain ridge to Height 5444.2 metres at Kaboberi (Raling), then generally southwards along Rasunkungpo (Rishinggumbe) mountain ridge to Niehlu (Niule) Bridge.
- 11) From Niehlu (Niule) Bridge, the boundary line runs generally eastwards to Chejenma (Gauri Shankar), and then eastwards along the mountain ridge and then northwards along the watershed between the Rongshar River and the Rongbuk River on the one hand and the tributaries of the Dudhkosi River on the other hand to Nangpa Pass, and then runs generally southeastwards along the mountain ridge, passing through Che Oyu mountain, Pumeli mountain (Gnire Langur), Mount Jolke Lungma (Sagar Matha) and Lhetse, to Makalu mountain; then runs southeastwards and then eastwards along the mountain ridge to Pepti Pass.
- 12) From Pepti Pass, the boundary line runs along the mountain ridge eastwards passing through Tsagala (Kepu Dada) to Kharala (Khade Dada), and then generally northeastwards passing through Lanapo (Lhanakpu) and Chebum (Chhipung) to the source of the Sunchunchu (Shumjung) River; then it follows the Sunchunchu (Shumjung) River to its junction with the track leading from Kimathangka to Chentang,

then it runs along the track to the bridge on the Kharma Tsangpo (Kama) River; thence it runs generally southeastwards along the Kharma Tsangpo (Kama) River passing through its junction with the Pengchu (Arun) River, and then along the Pengchu (Arun) River to its junction with the Nadang River, then continues to follow the Pengchu (Arun) River westwards to its junction with the Tsekangchingpo (Chhekang) River; thence the boundary line departs from the Pengchu (Arun) River and runs generally eastwards along a mountain spur passing through Angde and Dalai (Tale) Pass to Dalaila (Tale), and then runs along the mountain ridge passing through Jungkan (Dukan), Kaijungan (Khachunkha), Renlangbu (Relinbu) and Sulula to reach Ragla (Rakha) Pass.

- 13) From Ragla (Rakha) Pass, the boundary line runs generally eastwards along the watershed between the tributaries of the Nadang River and the tributaries of the Yaru River on the one hand and the tributaries of the Tamar River on the other hand, passing through Ombela (Ombak) Pass, Theputala (Tiptala) Pass, Yangmakhangla (Kangla) Pass and Chabukla to the terminal point where the watershed between the Khar River and the Chabuk River meets the watershed between the Khar River and the Lhenak River.

The entire boundary line between the two countries as described in the present Article is shown on the 1:500,000 maps of the entire boundary attached to the present Treaty; the location of the temporary boundary markers erected by both sides and the detailed alignment of certain sections of the boundary are shown on the 1:50,000 maps of these sections attached to the present Treaty.

Article 2:

The Contracting Parties have agreed that wherever the boundary follows a river, the midstream line shall be the boundary. In case a boundary river changes its course, the original line of the boundary shall remain unchanged in the absence of other agreements between the two Parties.

Article 3:

After the signing of the present Treaty, the Chinese-Nepalese Joint Boundary Committee constituted in pursuance of the Agreement of March 21, 1960 between the two Parties on the question of the boundary between the two countries shall set up permanent boundary markers as

necessary on the boundary line between the two countries, and then draft a protocol setting forth in detail the alignment of the entire boundary line and the location of the permanent boundary markers, with detailed maps attached thereto showing the boundary line and the location of the permanent boundary markers. The above-mentioned protocol, upon being signed by the Governments of the two countries, shall become an annex to the present Treaty and the detailed maps shall replace the maps now attached to the present Treaty.

Upon the signing of the above mentioned protocol, the tasks of the Chinese-Nepalese Joint Boundary Committee shall be terminated, and the Agreement of March 21, 1960 between the two Parties on the question of the boundary between the two countries shall cease to be in force.

Article 4:

The Contracting Parties have agreed that any dispute concerning the boundary which may arise after the formal delimitation of the boundary between the two countries shall be settled by the two Parties through friendly consultations.

Article 5:

The present Treaty shall come into force on the day of the signing of the Treaty.

Done in duplicate in Peking on October 5, 1961, in the Chinese, Nepalese and English languages, all three texts being equally authentic.

Liu Shao-chi
Chairman of the People's
Republic of China

Mahendra Bir Bikram Shah Deva
His Majesty the King
of Nepal